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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

Catalog of Meteorological Satellite Data- ESSA 9 Television Cloud Photography

April 1-June 30, 1969



SILVER SPRING, MD.
1970

PURPOSE

The Key to Meteorological Records Documentation Series has been established to provide guidance information to research personnel making use of climatological data.

Frequently users of such data have found it necessary to spend a great deal of time establishing whether the criteria for observing or computing elements have changed over the period of record or in what form the data are available.

It is therefore hoped that the presentation of this series may not only conserve valuable time but may have a direct influence in improving the accuracy of research results.

EARLIER TIROS AND ESSA DATA CATALOGS

Earlier catalogs of TIROS and ESSA Meteorological Satellite data are available in this series, as follows:

- No. 5.31 "Catalogue of Meteorological Satellite Data - TIROS I Television Cloud Photography", published in 1961, price 70 cents.
- No. 5.32 "Catalogue of Meteorological Satellite Data - TIROS II Television Cloud Photography", published in 1963, price 20 cents.
- No. 5.33 "Catalogue of Meteorological Satellite Data - TIROS III Television Cloud Photography", published in 1962, price 70 cents.
- No. 5.34 "Catalogue of Meteorological Satellite Data - TIROS IV Television Cloud Photography", published in 1963, price \$1.00.
- No. 5.35 "Catalogue of Meteorological Satellite Data - TIROS V Television Cloud Photography ", published in 1964, price \$1.75.
- No. 5.36 "Catalogue of Meteorological Satellite Data - TIROS VI Television Cloud Photography", published in 1964, price \$2.00.
- No. 5.37 "Catalogue of Meteorological Satellite Data - TIROS VII Television Cloud Photography Part 1 June 19, 1963 to December 31, 1963", published in 1965, price \$1.25
- No. 5.37 "Catalogue of Meteorological Satellite Data - TIROS VII Television Cloud Photography Part 2 January 1, 1964 to June 30, 1964", published in 1965, price \$1.00.
- No. 5.37 "Catalogue of Meteorological Satellite Data - TIROS VII Television Cloud Photography Part 3 July 1, 1964 to December 30, 1964", published in 1965, price \$1.00
- No. 5.37 "Catalogue of Meteorological Satellite Data - TIROS VII Television Cloud Photography Part 4 January 1, 1965 to December 31, 1965", published in 1966, price 45 cents.
- No. 5.38 "Catalogue of Meteorological Satellite Data - TIROS VIII Television Cloud Photography Part 1 December 21, 1963 to June 30, 1964", published in 1965 price \$1.00.
- No. 5.38 "Catalogue of Meteorological Satellite Data - TIROS VIII Television Cloud Photography Part 2 July 1, 1964 to December 31, 1964", published in 1965, price \$1.00.

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U.S. DEPARTMENT OF COMMERCE
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ENVIRONMENTAL DATA SERVICE
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KEY TO METEOROLOGICAL RECORDS DOCUMENTATION NO. 5.322

Catalog of Meteorological Satellite Data- ESSA 9 Television Cloud Photography

APRIL 1-JUNE 30, 1969

U.S. GOVERNMENT PRINTING OFFICE

PREFACE

This issue in the series of catalogs describing the television cloud photography obtained by meteorological satellites includes material from ESSA 9. It covers the period of April 1, 1969, thru June 30, 1969. The maps and listings generally follow the pattern established in the "Catalogue of Meteorological Satellite data - TIROS I Television Cloud Photography", published as No. 5.31 in the Environmental Data Service Series Key to Meteorological Records Documentation. However, digitized cloud maps replace the manually constructed nephanalyses which had been used in the previous catalogs. There are two maps for each day; the first polar stereographic projection in each set is for the Northern Hemisphere and the second for the Southern Hemisphere. These maps are arranged according to pass day.

Visual Products Support Branch
National Environmental Satellite Service

USING THE CATALOG

1. Scan the digitized cloud maps for areas of particular interest.
2. When a picture of interest is located, the film can be ordered by reel number and date from the National Climatic Center, Asheville, North Carolina 28801, at a cost of \$8.50 per reel.
3. Information for a particular pass, such as start time, subsatellite point (the point where the local vertical through the satellite intersects the earth's surface), and track number, may be determined by using the tabulated listings preceding the digitized cloud maps.

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CATALOG OF METEOROLOGICAL SATELLITE DATA -
ESSA 9 TELEVISION CLOUD PHOTOGRAPHY
April 1, 1969 - June 30, 1969

The ESSA 9 Meteorological Satellite, launched February 26, 1969, by the National Aeronautics and Space Administration, is the ninth Environmental Survey Satellite in the TIROS Operational (TOS) System. ESSA 9 was put into a nearly circular, sun-synchronous polar orbit, approximately 910 statute miles above the earth's surface with an apogee of 934.4 statute miles and a perigee of 884.5 statute miles. The orbit is inclined at 102° (Retrograde) to the equatorial plane with a nodal period of 115.3 minutes which corresponds to less than 13 orbits of the earth each day.

ESSA 9 is a TIROS type satellite in a "cartwheel" configuration which allows earth-oriented picture coverage. The spacecraft is spin stabilized and magnetically torqued to a wheel attitude, so that the spin axis is normal to the plane of the orbit and the radially mounted cameras view the earth once during each spacecraft revolution about its axis.

The cameras in the ESSA 9 satellite are one inch diameter vidicons (television camera tube) of the Advanced Vidicon Camera System (AVCS) Type. Each picture covers an area of approximately 4,000,000 square miles. One camera provides full global coverage, therefore, two cameras provide full system redundancy.

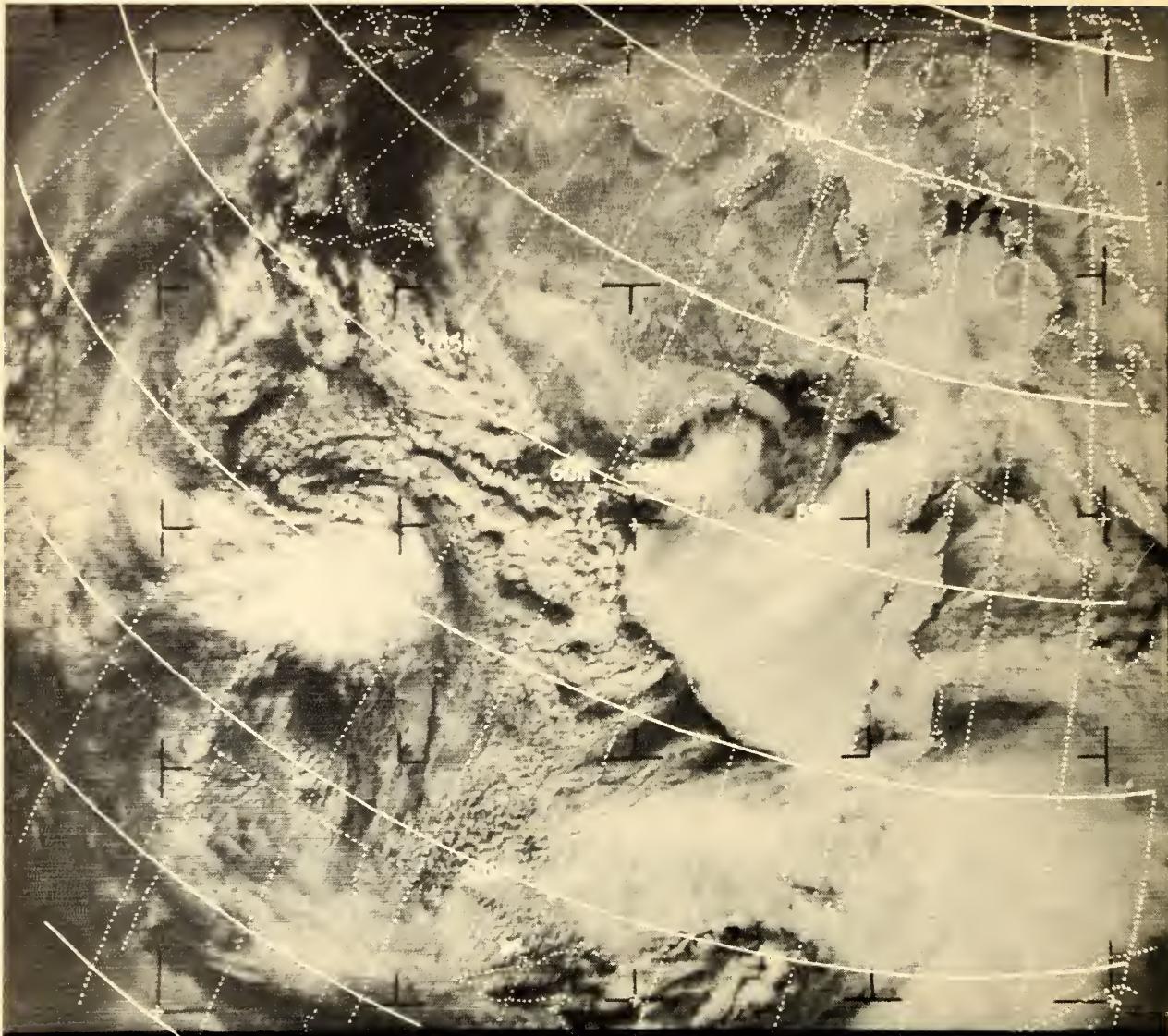
Each of the cameras can independently take pictures and store them for later playback to one of the Command-and-Data-Acquisition (CDA) stations which are located at Wallops Station near Chincoteague, Virginia, and Gilmore Creek, Fairbanks, Alaska.

Pictures taken every 260 seconds, are usually in sequences of twelve frames to a pass. Each frame is electronically gridded by computer with latitude and longitude lines and geographic outlines merged with the picture. An identification legend underneath each picture provides the following information: year, month, day, hour, minute, and second of picture taking time; track and zone numbers; station initial; satellite number; mode; camera; latitude of a labeled grid intersection near the picture center; latitude spacing of grids in degrees; longitude of a labeled grid near the center of the picture; longitude spacing of a labeled grid in degrees; pass number; frame number; and sun glint position. The picture, figure 1, is located in the area of track 3 (TABLE 1) zone 68 (not referenced) with the latitude and longitude point of the picture located at 54° N and 97° W. The grids are spaced at 5° in both latitude and longitude, and sun glint position is shown in the picture at 54°N and 97°W.

For ESSA 9 the system of "tracks" is used to identify the general geographic areas over which picture sequences were taken. These tracks are listed in the ESSA 9 track table (TABLE 1) and are shown on the locator map (FIGURE 2) which appear in this catalog immediately following the tabulated listings. The track boundaries are parallel to the path followed by the subsatellite point during the daylight portion of each orbital pass. The width of each track is exactly equal to the amount the earth rotates between consecutive passes. Thus, in general, the subsatellite point makes one traverse along each track each day (from midnight to midnight, GMT). The track boundaries are fixed for the life of ESSA 9, and are arbitrarily referenced to the point of latitude, with track numbers increasing westward.

Since the ESSA 9 orbital period of 115.3 minutes is not an exact submultiple of 24 hours the satellite starts 12 and 13 passes on alternate days. This results in track 13 being much narrower than the others and, thus, is not traversed every day. There are also days on which one particular track is traversed just after GMT midnight, and again later the same day just before GMT midnight.

The following pages of tabulated listings give descriptive information about the pictures obtained by ESSA 9. In the listings each picture sequence is described by one line, and the sequences are grouped together by date and track number.



YR	MO	DY	HR	MIN	SC	TK	ZO	S	ESSA	M	C	LAT	SP	LONG	SP	CRBIT	FR	SUN	GLINT,
69	6	30	19	14	55	3	68	9	9	7	2	60N	5	95W	5	1554	3	54N	97W

Figure 1 - Example of ESSA 9 Cloud Photography.

The column headings and entries have the following meaning:

PASS: Orbital pass number on which the pictures were taken.

TRACK: Defines the geographic area which contains the path of the subsatellite point. The entries refer to TABLE 1 and to the numbered areas outlined in FIGURE 2.

C: Camera number indicated in the legend.

1 = Camera one

2 = Camera two

S: Command-and-Data-Acquisition (CDA) station which received the sequence.

W = Wallops Station, Virginia.

F = Fairbanks, Alaska.

ALONG: Longitude of ascending node (equatorial crossing).

MODA: Month and day on which pictures were taken.

HRMNSE: Time in hours, minutes, and seconds of the first picture taken.

SUBSATELLITE POINT PICTURE LOCATION: Indicates the latitude in degrees of the subsatellite point for each of the twelve frames in the orbital pass sequence. First latitude column corresponds to picture frame No. 12.

The digitized cloud maps that appear in this catalog are prepared by a high speed digital computer. In this process the signals comprising the picture taken by the satellite are assigned numerical values to indicate the relative brightness of each element. These data are normalized brightness, earth-located, and repositioned on a standard map projection. Magnetic tapes are produced for input into a cathode ray tube film display device. These digitized cloud maps are constructed so that the overlap of day, 24 hours apart, is positioned in an area between 80 and 60 degrees East. On some days, the first pass of the mosaic day is the same as the last pass of the previous day to keep the 24 hour break in the required area. A detailed description of the procedures used to produce these digitized cloud maps is contained in reference 1; a condensed and edited version of this same article appears in reference 2.

In addition to the reduced hemispheric imagery used as a key in this catalog, fourteen additional computer mapped video products are also produced; eight polar stereographic octants and six Mercator segments for each day. The digitized cloud maps are the reduced resolution northern and southern polar hemispheric chips in which latitude and longitude lines are spaced at 10° intervals. In some instances, blank areas and mislocated clouds appear on the digitized cloud maps which are irregularities of the computer operation and should be disregarded. The date appears in the lower right corner of the page along with inclusive pass numbers for the day.

The basic ESSA 9 gridded picture master films are deposited at the National Climatic Center (NCC), National Oceanic and Atmospheric Administration, Federal Building, Asheville, North Carolina 28801. Persons or institutions desiring copies may order them from the NCC in the form of 35 mm. positive transparencies for projection or 35 mm. duplication negatives from which opaque copies can be made. Beginning with the data of April 1, 1969, the

individual gridded pictures are archived using a format, consisting of six master reels, that utilizes the "TRACK SYSTEM". Each of the first five of these reels contains pairs of tracks, and the sixth contains track 11 and 12, as well as 13 when there is a track 13. Each master reel is for half a month period, the 15th being taken as the last day of the first half for all months. Also, starting with the data for April 1, 1969, the computer mapped imagery is made up in half month units and comprises a seventh master reel. The following is a list of the reels and their contents:

<u>Reel</u>	<u>Tracks</u>	<u>Contents</u> (Half months increments 1st - 15th; 16th - End of Month)
1	1 & 2	Individual Analog Gridded Pictures
2	3 & 4	Individual Analog Gridded Pictures
3	5 & 6	Individual Analog Gridded Pictures
4	7 & 8	Individual Analog Gridded Pictures
5	9 & 10	Individual Analog Gridded Pictures
6	11, 12 & 13 (When there is a 13th track)	Individual Analog Gridded Pictures
7		Digitized Computer Mapped Imagery.

Persons or institutions desiring copies of any of the satellite data received subsequent to March 31, 1969, should order by reel number and date at a cost of \$8.50 per reel.

Apart from the 14 digital frames described previously, a growing list of multiday computer mapped products are available from the NCC. Starting October 1968, 5-day mean charts have been interspersed chronologically as they are available on the reel of digitized computer mapped imagery (reel 7) and 30-day mean charts produced on a 15-day overlapped basis also are included along with 90-day seasonal mean charts. From November 1967 to October 1968, these mean charts were produced on an experimental basis and are also available upon request from the NCC. These multiday computer mapped products have also been consolidated into a separate yearly archive of 35 mm. film imagery with the 1967 and 1968 pictures included on one reel and the 1969 and subsequent years archived as contiguous reels.

All copies will be furnished with sprocket holes since the necessary emulsion is available only in this form. Individual frame enlargements, in the form of 8 x 10 glossy prints are available for the TIROS and ESSA series. The service charge at the time of this printing is \$4.00 for each print and, if desired, the prints can be individually certified for an additional \$1.00 per print. Available also from the NCC, for the cost of reproduction, are reels of microfilmed naphanalysis charts for TIROS I to ESSA 9.

REFERENCES

1. Bristor, C. L., Callicott, W. M., and Bradford, R. E. : "Operational Processing of Satellite Cloud Pictures by Computer," "Monthly Weather Review, Vol. 94 No. 8, August 1966, pp. 515-527.
2. U.S. Department of Commerce, Environmental Science Services Administration, Environmental Data Service, "Catalog of Meteorological Satellite Data - ESSA 3 Television Cloud Photography, Part 2, January 1, 1967 to March 31, 1967", KMRD No. 5.313, Washington, D.C., 1967.

PASS	TRACK	C	S	ALON	MO	OA	HRMNSE	SUB-SATELLITE				POINT				PICTURE		LOCATION	
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	
426	11	1		44E	04	01	110401	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N
427	12	1		15E	04	01	130909	59S	46S	33S	20S	7S	5N	19N	32N	45N	58N	70N	78N
428	1	1		14W	04	01	150421	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
429	2	1		43W	04	01	160934	59S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	78N
430	3	1		71W	04	01	180448	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
431	4	1		100W	04	01	200004	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	
432	5	1		129W	04	01	220523	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	
433	6	1		158W	04	02	000043	59S	47S	34S	21S	7S	5N	18N	32N	45N	58N		
434	7	1		173E	04	02	020601	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
435	8	1		145E	04	02	040125	59S	46S	33S	20S	7S	6N	19N	32N	46N	58N	70N	78N
436	9	1		116E	04	02	060654	58S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
437	10	1		87E	04	02	080222	58S	45S	32S	19S	6S	7N	20N	34N	47N	60N	71N	78N
438	11	1		58E	04	02	100737	58S	45S	32S	19S	6S	6N	20N	33N	46N	59N	71N	78N
439	12	1		29E	04	02	120244	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	70N	78N
440	1	1		0W	04	02	140756	59S	46S	33S	20S	7S	6N	19N	32N	46N	58N	70N	78N
441	2	1		28W	04	02	160307	59S	46S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
442	3	1		57W	04	02	170820	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
443	4	1		85W	04	02	190335	59S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	78N
444	5	1		115W	04	02	210852	59S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	
445	6	1		144W	04	02	230410	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
446	7	1		172W	04	03	010932	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
447	8	1		159E	04	03	030455	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N
448	9	1		130E	04	03	050020	58S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
449	10	1		101E	04	03	070548	58S	45S	32S	19S	6S	7N	20N	34N	47N	60N	71N	78N
450	11	1		72E	04	03	090104	58S	45S	32S	19S	6S	6N	20N	33N	46N	59N	71N	78N
451	12	1		43E	04	03	110610	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	70N	78N
452	13	1		15E	04	03	130118	59S	46S	33S	20S	7S	5N	19N	32N	45N	58N	70N	78N
453	1	1		14W	04	03	150628	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
454	2	1		43W	04	03	170140	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	78N
455	3	1		72W	04	03	180654	60S	47S	34S	21S	8S	5N	18N	31N	45N	58N	70N	77N
456	4	1		101W	04	03	200210	60S	47S	34S	21S	8S	5N	18N	31N	45N	58N	70N	
457	5	1		130W	04	03	220728	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
458	6	1		158W	04	04	000249	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N		
459	7	1		173E	04	04	020811	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
460	8	1		144E	04	04	040335	59S	46S	33S	20S	7S	6N	19N	32N	46N	59N	70N	78N
461	9	1		115E	04	04	060857	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	71N	78N
462	10	1		86E	04	04	080425	58S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N
463	11	1		58E	04	04	100943	58S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N
464	12	1		29E	04	04	120455	58S	46S	33S	20S	6S	6N	19N	33N	46N	59N	71N	78N
465	1	1		0W	04	04	140958	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
466	2	1		29W	04	04	160509	59S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	78N
467	3	1		58W	04	04	180022	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
468	4	1		87W	04	04	190537	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
469	5	1		115W	04	04	210054	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
470	6	1		144W	04	04	230613	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	
471	7	1		173W	04	05	010134	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
472	8	1		158E	04	05	030658	59S	46S	33S	20S	7S	6N	19N	32N	46N	58N	70N	78N
473	9	1		129E	04	05	050223	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	71N	78N
474	10	1		101E	04	05	070802	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	72N	78N
475	11	1		72E	04	05	090318	58S	45S	32S	19S	6S	7N	20N	33N	47N	59N	71N	78N
476	12	1		43E	04	05	110824	58S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N
477	13	1		14E	04	05	130332	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N
478	1	1		15W	04	05	150842	59S	46S	33S	20S	7S	5N	19N	32N	45N	58N	70N	
479	2	1		44W	04	05	170354	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
480	3	1		72W	04	05	180908	59S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	
481	4	1		101W	04	05	200424	59S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	
482	5	1		130W	04	05	220944	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
483	6	1		159W	04	06	000505	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N		
484	7	1		172E	04	06	020025	59S	46S	33S	20S	7S	6N	19N	32N	46N	58N	70N	78N
485	8	1		143E	04	06	040549	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	71N	78N
486	9	1		115E	04	06	060116	58S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N
487	10	1		86E	04	06	080644	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	72N	78N
488	11	1		57E	04	06	100202	58S	45S	32S	19S	5S	7N	20N	34N	47N	60N	71N	78N
489	12	1		28E	04	06	120709	58S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N
490	1	1		1W	04	06	140218	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	71N	78N
491	2	1		29W	04	06	160729	59S	46S	33S	20S	7S	6N	19N	32N	46N	59N	70N	78N
492	3	1		58W	04	06	180242	59S	46S	33S	20S	7S	6N	19N	32N	45N	58N	70N	78N
493	4	1		87W	04	06	190757	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
494	5	1		116W	04	06	210314	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	
495	6	1		145W	04	06	230834	59S	46S	33S	20S	7S	6N	19N	32N	46N	58N	70N	
496	7	1		174W	04	07	010355	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
497	8	1		158E	04	07	030918	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
498	9	1		129E	04	07	050444	58S	45S	32S	19S	5S	7N	20N	33N	47N	59N	71N	78N
499	10	1		100E	04	07	070008	5											

PASS	TRACK	C	S	ALON	MO	DA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT				
501	12	1		42E	04	07	110030	58S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
502	13	1		14E	04	07	130538	59S	46S	33S	20S	7S	6N	19N	32N	46N	59N	70N	78N
503	1	1		15W	04	07	150047	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
504	2	1		44W	04	07	170559	59S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	78N
505	3	1		73W	04	07	190113	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	78N
506	4	1		102W	04	07	200629	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
507	5	1		131W	04	07	220147	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	
508	6	1		159W	04	08	000707	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
509	7	1		172E	04	08	020229	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
510	8	1		143E	04	08	040753	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
511	9	1		114E	04	08	060320	58S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N
512	10	1		85E	04	08	080848	58S	45S	32S	19S	6S	7N	20N	34N	47N	60N	71N	78N
513	11	1		56E	04	08	100405	58S	45S	32S	19S	6S	7N	20N	33N	47N	59N	71N	78N
514	12	1		28E	04	08	120912	58S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
515	1	1		1W	04	08	140421	59S	46S	33S	20S	7S	6N	19N	32N	46N	59N	70N	78N
516	2	1		30W	04	08	160932	59S	46S	33S	20S	7S	5N	19N	32N	45N	58N	70N	78N
517	3	1		59W	04	08	180445	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
518	4	1		88W	04	08	190959	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
519	5	1		116W	04	08	210518	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
520	6	1		145W	04	08	230037	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	
521	7	1		174W	04	09	010556	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
522	8	1		157E	04	09	030118	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N
523	9	1		128E	04	09	050643	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
524	10	1		99E	04	09	070210	58S	45S	32S	19S	6S	7N	20N	34N	47N	60N	71N	78N
525	11	1		71E	04	09	090727	58S	45S	32S	19S	6S	6N	20N	33N	46N	59N	71N	78N
526	12	1		42E	04	09	110233	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	70N	78N
527	13	1		13E	04	09	130741	59S	46S	33S	20S	7S	5N	19N	32N	45N	58N	70N	78N
528	1	1		16W	04	09	150252	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
529	2	1		45W	04	09	170805	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	78N
530	3	1		73W	04	09	190319	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
531	4	1		102W	04	09	200836	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
532	5	1		131W	04	09	220355	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	
533	6	1		160W	04	10	000916	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
534	7	1		171E	04	10	020439	59S	47S	34S	20S	7S	6N	19N	32N	46N	58N	70N	78N
535	8	1		142E	04	10	040004	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	71N	78N
536	9	1		114E	04	10	060531	58S	46S	33S	19S	6S	6N	20N	33N	47N	59N	71N	78N
537	10	1		85E	04	10	080101	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	72N	78N
538	11	1		56E	04	10	100618	58S	45S	32S	19S	5S	7N	20N	34N	47N	60N	71N	78N
539	12	1		27E	04	10	120123	58S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N
540	1	1		2W	04	10	140631	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N
541	2	1		30W	04	10	160140	59S	47S	33S	20S	7S	5N	19N	32N	45N	58N	70N	78N
542	3	1		59W	04	10	180652	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
543	4	1		88W	04	10	200206	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	78N
544	5	1		117W	04	10	210722	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	
545	6	1		146W	04	10	230240	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
546	7	1		175W	04	11	010801	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
547	8	1		157E	04	11	030323	59S	46S	33S	20S	7S	6N	19N	32N	46N	59N	70N	78N
548	9	1		128E	04	11	050847	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	71N	78N
549	10	1		99E	04	11	070414	58S	46S	33S	19S	6S	7N	20N	33N	47N	59N	71N	78N
550	11	1		70E	04	11	090930	58S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N
551	12	1		41E	04	11	110435	59S	46S	33S	20S	7S	6N	19N	32N	46N	58N	70N	78N
552	13	1		12E	04	11	130943	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
553	1	1		16W	04	11	150452	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N
554	2	1		45W	04	11	170004	60S	47S	34S	21S	8S	5N	18N	31N	45N	57N	69N	77N
555	3	1		74W	04	11	190518	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	
556	4	1		103W	04	11	210034	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	
557	5	1		132W	04	11	220551	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	
558	6	1		160W	04	12	000113	60S	47S	34S	21S	8S	5N	18N	31N	45N	58N	70N	
559	7	1		171E	04	12	020635	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
560	8	1		142E	04	12	040200	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
561	9	1		113E	04	12	060726	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
562	10	1		84E	04	12	080255	58S	46S	33S	19S	6S	6N	20N	33N	47N	59N	71N	78N
563	11	1		55E	04	12	100812	58S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
564	12	1		27E	04	12	120319	59S	46S	33S	20S	7S	6N	19N	32N	46N	59N	70N	78N
565	1	1		2W	04	12	140827	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
566	2	1		31W	04	12	160338	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	78N
567	3	1		60W	04	12	180851	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N
568	4	1		89W	04	12	200406	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N
569	5	1		117W	04	12	210923	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
570	6	1		146W	04	12	230444	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	
571	7	1		175W	04	13	010005	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
572	8	1		156E	04	13	030529	59S	47S	34S	20S	7S	6N	19N	32N	46N	58N	70N	78N
573	9	1		127E	04	13	050054	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N
574	10	1		98E	04	13	070622	58S	46S	33S	19S	6S	7N	20N	33N	47N	59N	71N	7

PASS	TRACK	C	S	ALON	MO	DA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
								LAT	LAT	LAT	LAT	LAT	LAT	LAT					
576	12	1		41E	04	13	110644	59S	46S	33S	20S	7S	6N	19N	32N	46N	59N	70N	78N
577	13	1		12E	04	13	130152	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
578	1	1		17W	04	13	150701	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
579	2	1		46W	04	13	170213	60S	47S	34S	21S	8S	5N	18N	31N	45N	58N	69N	77N
580	3	1		75W	04	13	190727	60S	48S	35S	21S	8S	4N	18N	31N	45N	57N	69N	77N
581	4	1		103W	04	13	210243	60S	48S	35S	21S	8S	4N	18N	31N	45N	57N	69N	
582	5	1		132W	04	13	220800	60S	48S	35S	21S	8S	4N	18N	31N	45N	57N	69N	
583	6	1		161W	04	14	000323	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
584	7	1		170E	04	14	020845	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	78N
585	8	1		141E	04	14	040410	59S	47S	34S	20S	7S	5N	19N	32N	46N	58N	70N	78N
586	9	1		113E	04	14	060937	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	71N	78N
587	10	1		84E	04	14	080506	58S	46S	32S	19S	6S	7N	20N	33N	47N	60N	71N	78N
588	11	1		55E	04	14	100023	58S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N
589	12	1		26E	04	14	120529	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N
590	1	1		3W	04	14	140038	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
591	2	1		32W	04	14	160549	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
592	3	1		60W	04	14	180056	60S	47S	34S	21S	8S	5N	18N	31N	45N	58N	70N	77N
593	4	1		89W	04	14	200609	60S	48S	35S	21S	8S	4N	18N	31N	45N	57N	69N	77N
594	5	1		120W	04	14	220125	61S	48S	35S	22S	9S	5N	15N	31N	45N	57N	70N	
595	6	1		147W	04	14	230643	60S	48S	35S	21S	8S	4N	18N	31N	45N	57N	69N	
596	7	1		176W	04	15	010203	60S	47S	34S	21S	8S	5N	18N	31N	45N	58N	70N	77N
597	8	1		156E	04	15	030725	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
598	9	1		127E	04	15	050249	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
599	10	1		98E	04	15	070815	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
600	11	1		69E	04	15	090330	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
601	12	1		40E	04	15	110834	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N
602	13	1		11E	04	15	130341	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N
603	1	1		17W	04	15	150849	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
604	2	1		46W	04	15	170400	61S	48S	35S	22S	9S	4N	17N	30N	44N	57N	69N	
605	3	1		75W	04	15	190913	61S	49S	36S	22S	9S	3N	17N	30N	43N	56N		
606	4	1		104W	04	15	210428	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
607	5	1		133W	04	15	220944	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
608	6	1		162W	04	16	000506	61S	49S	36S	22S	9S	4N	17N	30N	44N	57N	69N	
609	7	1		168E	04	16	020028	61S	49S	36S	23S	9S	4N	18N	31N	45N	57N	69N	78N
610	8	1		139E	04	19	040551	61S	49S	36S	23S	9S	4N	18N	31N	45N	57N	69N	78N
611	9	1		112E	04	16	060117	60S	48S	35S	21S	8S	5N	18N	31N	45N	58N	70N	77N
612	10	1		83E	04	16	080645	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
613	11	1		54E	04	16	100202	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	78N
614	12	1		26E	04	16	120708	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N
615	1	1		3W	04	16	140217	61S	48S	35S	22S	8S	4N	17N	31N	44N	57N	69N	77N
616	2	1		32W	04	16	160728	61S	48S	35S	22S	9S	4N	17N	30N	44N	57N	69N	77N
617	3	2		63W	04	16	180241	62S	49S	36S	23S	10S	4N	17N	31N	44N	57N	69N	78N
618	4	1		90W	04	16	200755	61S	49S	36S	22S	9S	3N	17N	30N	43N	56N		
619	5	1		119W	04	16	220315	61S	48S	35S	22S	9S	4N	17N	30N	44N	57N	69N	
620	6	1		147W	04	16	230834	61S	48S	35S	22S	9S	4N	17N	30N	44N	57N	69N	
621	7	1		176W	04	17	010355	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
622	8	1		155E	04	17	030918	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
623	9	1		126E	04	17	050444	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N
624	10	1		97E	04	17	070011	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
625	11	1		69E	04	17	090528	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	78N
626	12	1		40E	04	17	110033	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N
627	13	1		11E	04	17	130541	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
628	1	1		18W	04	17	150050	61S	48S	35S	22S	9S	4N	17N	30N	44N	56N	69N	77N
629	2	1		47W	04	17	170602	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
630	3	1		76W	04	17	190116	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
631	4	1		104W	04	17	210632	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
632	5	1		133W	04	17	230150	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
633	6	1		162W	04	18	000708	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
634	7	1		169E	04	18	020230	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N	77N
635	8	1		140E	04	18	040754	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
636	9	1		111E	04	18	060320	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N
637	10	1		83E	04	18	080848	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
638	11	1		54E	04	18	100406	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N
639	12	1		25E	04	18	120912	60S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
640	1	1		4W	04	18	140421	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
641	2	1		33W	04	18	160932	61S	49S	36S	22S	9S	4N	17N	30N	44N	56N	69N	77N
642	3	1		61W	04	18	180444	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
643	4	1		90W	04	18	200959	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
644	5	1		119W	04	18	220516	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	69N	
645	6	1		148W	04	19	000036	61S	49S	36S	22S	9S	3N	17N	30N	43N	56N	69N	
646	7	1		177W	04	19	010557	61S	49S	35S	22S	9S	4N	17N	30N	44N	57N	69N	77N
647	8	1		154E	04	19	030120	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
648	9	1		126E	04	19	050645	60S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
649	10	1		97E	04	19	070213	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
650	11	1		68E															

PASS	TRACK	C	S	ALON	MO	DA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
651	12	1		39E	04	19	110237	60S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
652	13	1		10E	04	19	130745	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
653	1	1		18W	04	19	150256	61S	49S	36S	22S	9S	3N	17N	30N	44N	56N	69N	77N
654	2	1		47W	04	19	170809	61S	49S	36S	22S	9S	3N	17N	30N	43N	56N	68N	77N
655	3	1		76W	04	19	190323	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
656	4	1		105W	04	19	210840	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
657	5	1		134W	04	19	230359	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
658	6	1		163W	04	20	000921	61S	49S	36S	22S	9S	4N	17N	30N	44N	57N	69N	
659	7	1		169E	04	20	020444	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
660	8	1		140E	04	20	040009	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
661	9	1		111E	04	20	060537	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
662	10	1		82E	04	20	080054	60S	47S	34S	21S	8S	5N	18N	31N	45N	57N	69N	77N
663	11	1		53E	04	20	100559	61S	48S	35S	22S	8S	4N	17N	31N	44N	57N	69N	77N
664	12	1		24E	04	20	120107	61S	48S	35S	22S	9S	4N	17N	30N	44N	57N	69N	77N
665	1	1		4W	04	20	140616	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
666	2	1		33W	04	20	160128	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	77N
667	3	1		62W	04	20	180642	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	77N
668	4	1		91W	04	20	200157	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	
669	5	1		120W	04	20	220715	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	
670	6	1		148W	04	21	000237	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	68N	
671	7	1		177W	04	21	010759	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
672	8	1		154E	04	21	030324	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
673	9	1		125E	04	21	050850	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
674	10	1		96E	04	21	070419	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
675	11	1		67E	04	21	090937	60S	47S	34S	21S	8S	5N	18N	31N	45N	58N	69N	77N
676	12	1		39E	04	21	110442	61S	48S	35S	22S	8S	4N	17N	31N	44N	57N	69N	77N
677	13	1		10E	04	21	130950	61S	48S	35S	22S	9S	4N	17N	30N	44N	57N	69N	77N
678	1	1		19W	04	21	150503	61S	49S	36S	22S	9S	3N	17N	30N	43N	56N	68N	77N
679	2	1		48W	04	21	170016	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
680	3	1		77W	04	21	190531	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
681	4	1		105W	04	21	210048	62S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
682	5	1		134W	04	21	230607	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
683	6	1		163W	04	22	010128	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N	
684	7	1		168E	04	22	020651	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
685	8	1		139E	04	22	040216	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
686	9	1		110E	04	22	060744	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
687	10	1		82E	04	22	080301	60S	47S	34S	21S	8S	5N	18N	31N	45N	57N	69N	77N
688	11	1		51E	04	22	100806	62S	49S	36S	22S	8S	4N	17N	31N	44N	57N	69N	77N
689	12	1		24E	04	22	120314	61S	49S	35S	22S	9S	4N	17N	30N	44N	56N	69N	77N
690	1	1		5W	04	22	140823	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
691	2	1		34W	04	22	160335	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	77N
692	3	1		63W	04	22	180849	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	77N
693	4	1		91W	04	22	200404	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	77N
694	5	1		120W	04	22	220922	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	
695	6	1		149W	04	23	000443	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	68N	
696	7	1		178W	04	23	020005	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
697	8	1		153E	04	23	030529	61S	49S	36S	22S	9S	4N	17N	31N	44N	57N	69N	77N
698	9	1		125E	04	23	050055	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
699	10	1		96E	04	23	070623	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	77N
700	11	2		67E	04	23	090141	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N
701	12	2		38E	04	23	110645	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
702	13	2		9E	04	23	130156	61S	49S	36S	22S	9S	4N	17N	30N	44N	56N	69N	77N
703	1	2		20W	04	23	150707	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
704	2	2		50W	04	23	170220	62S	49S	36S	23S	10S	4N	17N	30N	44N	56N	68N	78N
705	3	2		77W	04	23	190734	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	77N
706	4	2		106W	04	23	210251	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	
707	5	2		135W	04	23	230810	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	68N	
708	6	2		164W	04	24	010329	62S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
709	7	2		168E	04	24	020852	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N	77N
710	8	2		139E	04	24	040418	61S	48S	35S	22S	8S	4N	17N	31N	44N	57N	69N	77N
711	9	2		110E	04	24	060945	60S	48S	35S	21S	8S	4N	18N	31N	45N	58N	69N	77N
712	10	2		81E	04	24	080501	60S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
713	11	2		52E	04	24	100007	61S	48S	35S	22S	9S	4N	17N	30N	44N	57N	69N	77N
714	12	2		23E	04	24	120515	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
715	1	2		5W	04	24	140024	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	77N
716	2	2		34W	04	24	160536	62S	50S	36S	23S	10S	3N	16N	29N	43N	56N	68N	77N
717	3	2		63W	04	24	180050	62S	50S	37S	23S	10S	2N	16N	29N	43N	56N	68N	77N
718	4	2		92W	04	24	200608	62S	50S	37S	23S	10S	2N	16N	29N	43N	56N	68N	
719	5	2		121W	04	24	220126	62S	50S	37S	23S	10S	3N	16N	29N	43N	56N	68N	
720	6	2		150W	04	25	000646	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	
721	7	2		178W	04	25	020208	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	68N	77N
722	8	2		153E	04	25	030732	61S	49S	36S	22S	9S	3N	17N	30N	44N	56N	69N	77N
723	9	2		124E	04	25	050259	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
724	10	2		95E	04	25	070827	60S											

PASS	TRACK	C	S	ALON	MO	DA	HRMNSE	LAT	LAT	LAT	LAT	LAT	POINT	PICTURE	LOCATION	LAT	LAT		
726	12	2		38E	04	25	110851	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
727	13	2		9E	04	25	130400	61S	49S	36S	22S	9S	3N	17N	30N	43N	56N	68N	77N
728	1	2		20W	04	25	150914	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
729	2	2		49W	04	25	170428	62S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
730	3	2		78W	04	25	190943	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	68N	77N
731	4	2		107W	04	25	210500	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	68N	
732	5	2		135W	04	25	230020	62S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
733	6	2		164W	04	26	010540	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
734	7	2		167E	04	26	030103	61S	49S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
735	8	2		138E	04	26	040629	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
736	9	2		109E	04	26	060156	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	77N
737	10	2		81E	04	26	080713	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N
738	11	2		52E	04	26	100219	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
739	12	2		23E	04	26	120726	61S	49S	36S	22S	9S	3N	17N	30N	43N	56N	68N	77N
740	1	2		6W	04	26	140236	62S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
741	2	2		35W	04	26	160751	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	68N	77N
742	3	2		64W	04	26	180305	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	77N
743	4	2		92W	04	26	200822	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	77N
744	5	2		121W	04	26	220340	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N	
745	6	2		150W	04	27	000900	62S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	
746	7	2		179W	04	27	020422	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N
747	8	2		152E	04	27	030947	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
748	9	2		124E	04	27	050513	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
749	10	2		95E	04	27	070042	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
750	11	2		66E	04	27	090600	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	69N	77N
751	12	2		37E	04	27	110108	60S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
752	13	2		8E	04	27	130620	61S	48S	35S	22S	8S	4N	17N	31N	44N	57N	69N	77N
753	1	2		21W	04	27	150132	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
754	2	2		49W	04	27	170646	61S	49S	35S	22S	9S	4N	17N	30N	44N	57N	69N	77N
755	3	2		78W	04	27	190202	61S	49S	36S	22S	9S	4N	17N	30N	44N	57N	69N	77N
756	4	2		107W	04	27	210720	61S	49S	35S	22S	9S	4N	17N	31N	44N	57N	69N	
757	5	2		136W	04	27	230241	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	
758	6	2		165W	04	28	010803	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	
759	7	2		166E	04	28	030327	60S	48S	35S	21S	8S	5N	18N	31N	45N	58N	69N	77N
760	8	2		138E	04	28	040854	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
761	9	2		109E	04	28	060423	59S	47S	34S	20S	7S	6N	19N	33N	46N	59N	70N	78N
762	10	2		80E	04	28	080940	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
763	11	2		51E	04	28	100445	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N
764	12	2		22E	04	28	120953	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N
765	1	2		6W	04	28	140506	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
766	2	2		37W	04	28	160014	62S	49S	36S	23S	9S	4N	18N	31N	44N	57N	69N	78N
767	3	2		64W	04	28	180532	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
768	4	2		93W	04	28	200048	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	77N
769	5	2		122W	04	28	220606	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	
770	6	2		151W	04	29	000127	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	
771	7	2		179W	04	29	020650	61S	48S	35S	21S	8S	4N	18N	31N	45N	57N	69N	77N
772	8	2		152E	04	29	040214	60S	48S	34S	21S	7S	5N	19N	32N	45N	58N	70N	77N
773	9	2		123E	04	29	050741	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
774	10	2		94E	04	29	070310	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
775	11	2		65E	04	29	090827	59S	46S	33S	20S	7S	6N	19N	33N	46N	58N	70N	78N
776	12	2		37E	04	29	110336	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
777	13	2		8E	04	29	130845	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N
778	1	2		21W	04	29	150357	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	69N	77N
779	2	2		50W	04	29	170910	60S	48S	35S	21S	8S	4N	18N	31N	45N	57N	69N	77N
780	3	2		79W	04	29	190425	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N
781	4	2		108W	04	29	210942	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N
782	5	2		136W	04	29	230502	60S	48S	35S	21S	8S	5N	18N	31N	45N	58N		
783	6	2		165W	04	30	010023	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
784	7	2		166E	04	30	030547	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
785	8	2		137E	04	30	050112	59S	47S	34S	20S	7S	6N	19N	32N	46N	59N	70N	78N
786	9	2		108E	04	30	060640	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
787	10	2		79E	04	30	080156	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N
788	11	2		51E	04	30	100702	60S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
789	12	2		22E	04	30	120210	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N
790	1	2		7W	04	30	140723	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	69N	77N
791	2	2		36W	04	30	160231	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N
792	3	2		65W	04	30	180749	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N
793	4	2		93W	04	30	200306	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	
794	5	2		122W	04	30	220824	61S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	
795	6	2		151W	05	01	000345	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	
796	7	2		180W	05	01	020908	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
797	8	2		151E	05	01	040433	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
798	9	2		122E	05	01	060000	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
799	10	2		94E	05	01	070529	59S	46S	33S	19S	6S	7N	20N	33N	47N	59N	71N	78N
800	11	2		65E	05	01	090047	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N

PASS	TRACK	C	S	ALON	MO	OA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
801	12	2	36E	05	01	110554	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N	
802	13	2	7E	05	01	130102	60S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N	
803	1	2	22W	05	01	150612	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N	
804	2	2	50W	05	01	170125	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	77N	
805	3	2	79W	05	01	190640	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N	
806	4	2	108W	05	01	210157	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N		
807	5	2	137W	05	01	230716	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N		
808	6	2	166W	05	02	010237	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N			
809	7	2	165E	05	02	030800	60S	47S	34S	20S	7S	6N	19N	32N	46N	58N	70N	78N	
810	8	2	137E	05	02	050325	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N	
811	9	2	108E	05	02	060852	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N	
812	10	2	79E	05	02	080409	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N	
813	11	2	50E	05	02	100915	59S	47S	33S	20S	7S	6N	19N	32N	46N	58N	70N	78N	
814	12	2	21E	05	02	120422	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N	
815	1	2	8W	05	02	140931	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	69N	77N	
816	2	2	42V	05	02	160444	61S	48S	35S	22S	8S	5N	19N	32N	45N	58N	70N	78N	
817	3	2	65W	05	02	180958	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N	
818	4	2	94W	05	02	200514	61S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N	
819	5	2	123W	05	02	220033	60S	48S	35S	21S	8S	5N	18N	31N	45N	57N	69N		
820	6	2	152W	05	03	000550	60S	48S	35S	21S	8S	5N	18N	31N	45N	57N	69N		
821	7	2	180W	05	03	020112	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N	
822	8	2	151E	05	03	040636	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N	
823	9	2	122E	05	03	060202	59S	47S	34S	20S	7S	6N	19N	33N	46N	59N	70N	78N	
824	10	2	93E	05	03	070730	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N	
825	11	2	64E	05	03	090248	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	70N	78N	
826	12	2	35E	05	03	110754	59S	47S	34S	20S	7S	6N	19N	32N	45N	58N	70N	78N	
827	13	2	7E	05	03	130303	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N	
828	1	2	22W	05	03	150814	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N	
829	2	2	51W	05	03	170327	60S	48S	35S	21S	8S	5N	18N	31N	45N	57N	69N	77N	
830	3	2	80W	05	03	190842	60S	48S	35S	21S	8S	5N	18N	31N	45N	57N	69N	77N	
831	4	2	109W	05	03	210359	60S	48S	35S	21S	8S	5N	18N	31N	45N	57N	69N		
832	5	2	137W	05	03	230918	60S	48S	35S	21S	8S	5N	18N	31N	45N	58N	69N		
833	6	2	166W	05	04	010442	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N		
834	7	2	165E	05	04	030005	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N	
835	8	2	136E	05	04	050531	59S	47S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N	
836	9	2	107E	05	04	070059	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N	
837	10	2	78E	05	04	080615	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N	
838	11	2	50E	05	04	100121	59S	47S	34S	20S	7S	6N	19N	32N	46N	58N	70N	78N	
839	12	2	21E	05	04	120629	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N	
840	1	2	8W	05	04	140138	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	69N	77N	
841	2	2	37W	05	04	160650	60S	48S	35S	21S	8S	5N	18N	31N	44N	57N	69N	77N	
842	3	2	66W	05	04	180204	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N	
843	4	2	95W	05	04	200720	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N		
844	5	2	123W	05	04	220238	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N		
845	6	2	152W	05	05	000758	60S	48S	35S	21S	8S	5N	18N	31N	45N	57N	69N		
846	7	2	179E	05	05	020321	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N	
847	8	2	150E	05	05	040845	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N	
848	9	2	121E	05	05	060411	59S	47S	34S	20S	7S	6N	19N	33N	46N	59N	70N	78N	
849	10	2	93E	05	05	070940	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N	
850	11	2	64E	05	05	090458	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N	
851	12	2	35E	05	05	110004	59S	47S	34S	20S	7S	6N	19N	32N	46N	58N	70N	78N	
852	13	2	6E	05	05	130513	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N	
853	1	2	23W	05	05	150024	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N	
854	2	2	52W	05	05	170537	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	69N	77N	
855	3	2	80W	05	05	190051	60S	48S	35S	21S	8S	5N	18N	31N	45N	57N	69N	77N	
856	4	2	109W	05	05	210613	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N		
857	5	2	138W	05	05	230133	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N		
858	6	2	167W	05	06	010650	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N			
859	7	2	164E	05	06	030214	60S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N	
860	8	2	136E	05	06	050739	59S	47S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N	
861	9	2	107E	05	06	070307	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N	
862	10	2	78E	05	06	080823	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N	
863	11	2	49E	05	06	100329	59S	47S	33S	20S	7S	6N	19N	32N	46N	58N	70N	78N	
864	12	2	20E	05	06	120836	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N	
865	1	2	9W	05	06	140346	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N	
866	2	2	37W	05	06	160858	60S	48S	35S	21S	8S	5N	18N	31N	45N	57N	69N	77N	
867	3	2	66W	05	06	180412	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N	77N	
868	4	2	95W	05	06	200928	61S	48S	35S	21S	8S	4N	18N	31N	44N	57N	69N		
869	5	2	124W	05	06	220446	60S	48S	35S	21S	8S	5N	18N	31N	45N	57N	69N		
870	6	2	153W	05	07	000008	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	70N		
871	7	2	179E	05	07	020531	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N	
872	8	2	150E	05	07	040055	60S	47S	34S	20S	7S	6N	19N	32N	46N	58N	70N	78N	
873	9	2	121E	05	07	060622	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	71N	78N	
874	10	2	92E	05	07	080151	59S	46S	33S	19S	6S	7N	20N	33N	47N	59N	71N	78N	
875	11	2	63E	05	07	090709	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N	

PASS	TRACK	C	S	ALON	MO	OA	HRMNSE	SUB-SATELLITE						POINT		PICTURE LOCATION			
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	
876	12	2		34E	05	07	110216	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	70N	78N
877	13	2		4E	05	07	130724	60S	47S	34S	21S	7S	6N	19N	33N	46N	59N	70N	78N
878	1	2		23W	05	07	150235	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
879	2	2		52W	05	07	170748	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	77N
880	3	2		81W	05	07	190303	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N
881	4	2		110W	05	07	210820	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
882	5	2		139W	05	07	230339	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
883	6	2		167W	05	08	010902	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N		
884	7	2		164E	05	08	030425	59S	47S	34S	20S	7S	6N	19N	33N	46N	59N	70N	78N
885	8	2		135E	05	08	050951	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
886	9	2		106E	05	08	070518	59S	46S	33S	19S	6S	7N	20N	34N	47N	60N	71N	78N
887	10	2		77E	05	08	090035	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	78N
888	11	2		49E	05	08	100541	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N
889	12	2		20E	05	08	120048	60S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
890	1	2		9W	05	08	140558	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	77N
891	2	2		38W	05	08	160110	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	77N
892	3	2		67W	05	08	180624	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	69N	77N
893	4	2		96W	05	08	200143	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
894	5	2		124W	05	08	220701	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
895	6	2		153W	05	09	000220	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	
896	7	2		178E	05	09	020742	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
897	8	2		149E	05	09	040307	59S	47S	34S	20S	7S	6N	19N	33N	46N	59N	70N	78N
898	9	2		120E	05	09	060833	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
899	10	2		92E	05	09	080402	58S	46S	32S	19S	6S	7N	20N	34N	47N	60N	71N	78N
900	11	2		63E	05	09	090919	58S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	78N
901				NO DATA															
902	13	2		5E	05	09	130935	59S	47S	33S	20S	7S	6N	19N	32N	46N	58N	70N	78N
903	1	2		24W	05	09	150445	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
904	2	2		53W	05	09	170958	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	77N
905	3	2		81W	05	09	190513	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
906	4	2		110W	05	09	210030	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
907	5	2		139W	05	09	230549	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
908	6	2		168W	05	10	010112	60S	47S	34S	20S	7S	6N	19N	32N	46N	58N		
909	7	2		163E	05	10	030635	59S	47S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N
910	8	2		135E	05	10	050200	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
911	9	2		106E	05	10	070728	58S	46S	32S	19S	6S	7N	20N	34N	47N	60N	71N	78N
912	10	2		77E	05	10	090245	58S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	78N
913	11	2		48E	05	10	100750	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	70N	78N
914	12	2		19E	05	10	120258	59S	47S	34S	20S	7S	6N	19N	32N	45N	58N	70N	78N
915	1	2		10W	05	10	140807	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	77N
916	2	2		38W	05	10	160319	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	77N
917	3	2		67W	05	10	180833	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	69N	77N
918	4	2		96W	05	10	200349	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	69N	
919	5	2		125W	05	10	220907	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
920	6	2		156W	05	11	000427	61S	47S	34S	21S	8S	5N	19N	32N	45N	58N	70N	
921	7	2		177E	05	11	020950	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
922	8	2		149E	05	11	040514	59S	47S	34S	20S	7S	6N	19N	33N	46N	58N	70N	78N
923	9	2		120E	05	11	060041	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
924	10	2		91E	05	11	080609	58S	46S	32S	19S	6S	7N	20N	34N	47N	60N	71N	78N
925	11	2		62E	05	11	100127	58S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	78N
926	12	2		33E	05	11	110634	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	70N	78N
927	13	2		5E	05	11	130142	59S	47S	33S	20S	7S	6N	19N	32N	46N	58N	70N	78N
928	1	2		24W	05	11	150653	60S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
929	2	2		53W	05	11	170206	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	77N
930	3	2		82W	05	11	190721	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	77N
931	4	2		111W	05	11	210238	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
932	5	2		140W	05	11	230757	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
933	6	2		168W	05	12	010319	60S	47S	34S	20S	7S	6N	19N	32N	45N	58N		
934	7	2		163E	05	12	030843	59S	47S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N
935	8	2		134E	05	12	050408	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
936	9	2		105E	05	12	070936	58S	46S	32S	19S	6S	7N	20N	34N	47N	60N	71N	78N
937	10	2		76E	05	12	090452	58S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	78N
938	11	2		48E	05	12	100958	58S	46S	33S	20S	6S	6N	19N	33N	46N	59N	70N	78N
939	12	2		19E	05	12	120505	58S	47S	34S	20S	7S	6N	19N	32N	45N	58N	70N	78N
940	1	2		10W	05	12	140015	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	77N
941	2	2		39W	05	12	160527	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N	77N
942	3	2		68W	05	12	180041	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	69N	77N
943	4	2		97W	05	12	200557	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	69N	77N
944	5	2		125W	05	12	220115	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	
945	6	2		154W	05	13	000637	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	
946	7	2		177E	05	13	020200	60S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N
947	8	2		148E	05	13	040725	59S	47S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N
948	9	2		119E	05	13	060252	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N
949	10	2		90E	05	13	080820	58S	45S	32S	19S	5S	7N	20N	3				

PASS	TRACK	C	S	ALON	MO	DA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
951	12	2	33E	05	13	110845	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N	
952	13	2	4E	05	13	130355	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	70N	78N	
953	1	2	25W	05	13	150906	59S	47S	34S	20S	7S	6N	19N	32N	46N	58N	70N	78N	
954	2	2	54W	05	13	170419	60S	47S	34S	20S	7S	6N	19N	32N	45N	58N	70N	78N	
955	3	2	82W	05	13	190935	60S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N	78N	
956	4	2	111W	05	13	210452	60S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N		
957	5	2	140W	05	13	230012	60S	47S	34S	20S	7S	6N	19N	32N	46N	58N	70N		
958	6	2	169W	05	14	010533	59S	47S	33S	20S	7S	6N	19N	33N	46N	59N			
959	7	2	162E	05	14	030057	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N	
960	8	2	133E	05	14	050623	59S	46S	33S	19S	6S	7N	20N	34N	47N	59N	71N	78N	
961	9	2	105E	05	14	070151	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N	
962	10	2	76E	05	14	090707	58S	45S	32S	19S	5S	7N	20N	34N	47N	60N	71N	78N	
963	11	2	47E	05	14	110213	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N	
964	12	2	18E	05	14	120721	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	70N	78N	
965	1	2	11W	05	14	140230	59S	47S	34S	20S	7S	6N	19N	32N	45N	58N	70N	78N	
966	2	2	39W	05	14	160745	60S	47S	34S	20S	7S	6N	19N	32N	45N	58N	70N	78N	
967	3	2	68W	05	14	180259	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N	
968	4	2	97W	05	14	200816	60S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N		
969	5	2	126W	05	14	220335	60S	47S	34S	20S	7S	6N	19N	32N	45N	58N	70N		
970	6	2	157W	05	15	000854	60S	47S	34S	20S	8S	6N	20N	33N	46N	59N	71N		
971	7	2	176E	05	15	020417	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	70N	78N	
972	8	2	148E	05	15	040942	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N	
973	9	2	119E	05	15	060509	58S	46S	32S	19S	6S	7N	20N	34N	47N	60N	71N	78N	
974	10	2	90E	05	15	080038	58S	45S	32S	18S	5S	8N	21N	34N	47N	60N	72N	78N	
975	11	2	61E	05	15	100556	58S	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N	
976	12	2	32E	05	15	120102	58S	46S	32S	19S	6S	7N	20N	34N	47N	59N	71N	78N	
977	13	2	3E	05	15	130611	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N	
978	1	2	25W	05	15	150122	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	70N	78N	
979	2	2	54W	05	15	170639	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	70N	78N	
980	3	2	83W	05	15	190154	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	70N	78N	
981	4	2	112W	05	15	210712	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	70N		
982	5	2	141W	05	15	230232	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N		
983	6	2	169W	05	16	010754	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	78N	
984	7	2	162E	05	16	030317	58S	46S	32S	19S	6S	7N	20N	34N	47N	60N	71N	78N	
985	8	2	133E	05	16	050844	58S	45S	32S	18S	5S	7N	21N	34N	47N	60N	72N	78N	
986	9	2	104E	05	16	070412	57S	45S	31S	18S	4S	8N	21N	35N	48N	61N	72N	78N	
987	10	2	75E	05	16	090929	57S	45S	31S	18S	5S	8N	21N	34N	48N	60N	72N	78N	
988	11	2	46E	05	16	110434	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N	
989	12	2	18E	05	16	120942	58S	46S	32S	19S	6S	7N	20N	33N	47N	59N	71N	78N	
990	1	2	11W	05	16	140452	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N	
991	2	2	40W	05	16	160003	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N	70N		
992	3	2	69W	05	16	180517	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	70N	78N	
993	4	2	98W	05	16	200033	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	70N		
994	5	2	126W	05	16	220551	59S	46S	33S	20S	6S	6N	19N	33N	46N	59N			
995	6	2	155W	05	17	000112	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N		
996	7	2	176E	05	17	020634	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N	
997	8	2	147E	05	17	040158	58S	46S	32S	19S	6S	7N	20N	34N	47N	59N	71N	78N	
998	9	2	118E	05	17	060725	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N	
999	10	2	89E	05	17	080253	57S	45S	31S	18S	5S	8N	21N	35N	48N	60N	72N	78N	
1000	11	2	61E	05	17	100810	57S	45S	31S	18S	5S	8N	21N	34N	47N	60N	72N	78N	
1001	12	2	32E	05	17	120317	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N	
1002	13	2	3E	05	17	130826	58S	46S	32S	19S	6S	7N	20N	34N	47N	59N	71N	78N	
1003	1	2	26W	05	17	150337	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N		
1004	2	2	55W	05	17	170849	59S	46S	33S	20S	6S	7N	20N	33N	46N	59N	71N		
1005	3	2	84W	05	17	190407	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N	78N	
1006	4	2	112W	05	17	210925	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N		
1007	5	2	141W	05	17	230444	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N		
1008	6	2	170W	05	18	010006	58S	46S	32S	19S	6S	7N	20N	34N	47N	59N	71N	78N	
1009	7	2	161E	05	18	030530	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N	
1010	8	2	132E	05	18	050056	58S	45S	32S	18S	5S	8N	21N	34N	48N	60N	72N	78N	
1011	9	2	104E	05	18	070624	57S	44S	31S	18S	4S	8N	22N	35N	48N	61N	72N	78N	
1012	10	2	75E	05	18	090140	57S	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1013	11	2	46E	05	18	110645	58S	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N	
1014	12	2	17E	05	18	130153	58S	45S	32S	19S	6S	7N	20N	34N	47N	59N	71N	78N	
1015	1	2	12W	05	18	140703	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	78N	
1016	2	2	41W	05	18	160215	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	71N		
1017	3	2	69W	05	18	180729	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	70N		
1018	4	2	98W	05	18	200245	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	70N		
1019	5	2	127W	05	18	220803	59S	46S	33S	20S	6S	6N	20N	33N	46N	59N	70N		
1020	6	2	156W	05	19	000327	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N			
1021	7	2	175E	05	19	020848	58S	46S	32S	19S	6S	7N	20N	34N	47N	59N	71N	78N	
1022	8	2	147E	05	19	040413	58S	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N	
1023	9	2	118E	05	19	060940	58S	45S	32S	18S	5S	8N	21N	34N	48N	60N	72N	78N	
1024	10	2	89E	05	19	080509	57S	44S	31S	18S	4S	8N	22N	35N	48N	61N	72N	78N	
1025	11	2	60E	05	19	100026	57S	44S	31S	18S	4S	8N	22N	35N	48N	60N	72N	78N	

PASS	TRACK	C	S	ALON	MO	DA	HRMNSE	SUB-SATELLITE						POINT PICTURE LOCATION					
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	
1026	12	2		31E	05	19	120533	58S	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N	78N
1027	13	2		2E	05	19	140042	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1028	1	2		26W	05	19	150553	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N
1029	2	2		55W	05	19	170105	58S	46S	33S	19S	6S	7N	20N	33N	47N	59N	71N	78N
1030	3	2		84W	05	19	190620	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	78N
1031	4	2		113W	05	19	210137	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	
1032	5	2		142W	05	19	230659	58S	46S	32S	19S	6S	7N	20N	34N	47N	59N		
1033	6	2		171W	05	20	010220	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1034	7	2		161E	05	20	030743	58S	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N
1035	8	2		132E	05	20	050309	57S	45S	31S	18S	5S	8N	21N	35N	48N	60N	72N	78N
1036	9	2		103E	05	20	070837	57S	44S	31S	17S	4S	9N	22N	35N	48N	61N	72N	78N
1037	10	2		75E	05	20	090353	57S	44S	31S	18S	4S	9N	22N	36N	49N	61N	75N	78N
1038	11	2		45E	05	20	110859	58S	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N	78N
1039	12	2		17E	05	20	130407	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1040	1	2		12W	05	20	140916	58S	46S	32S	19S	6S	7N	20N	34N	47N	59N	71N	78N
1041	2	2		41W	05	20	160428	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	78N
1042	3	2		70W	05	20	180942	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	78N
1043	4	2		99W	05	20	200458	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	
1044	5	2		128W	05	20	220016	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	
1045	6	2		156W	05	21	000536	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	
1046	7	2		175E	05	21	020058	58S	46S	32S	19S	6S	7N	20N	34N	47N	59N	71N	78N
1047	8	2		146E	05	21	040623	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1048	9	2		117E	05	21	060149	58S	45S	31S	18S	5S	8N	21N	35N	48N	60N	72N	78N
1049	10	1		88E	05	21	080715	57S	44S	31S	18S	4S	8N	22N	35N	48N	61N	72N	78N
1050	11	1		60E	05	21	100233	57S	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N
1051	12	1		31E	05	21	120742	58S	45S	32S	19S	5S	8N	21N	35N	47N	60N	72N	79N
1052	13	1		2E	05	21	140251	58S	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N
1053	1	1		27W	05	21	150802	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N
1054	2	1		56W	05	21	170314	58S	46S	32S	19S	6S	7N	20N	33N	47N	59N	71N	78N
1055	3	1		85W	05	21	190829	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N
1056	4	1		113W	05	21	210346	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	
1057	5	1		142W	05	21	230904	58S	45S	32S	19S	5S	7N	20N	34N	47N	60N	71N	
1058	6	1		171W	05	22	010425	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1059	7	1		160E	05	22	030949	58S	45S	32S	18S	5S	8N	21N	34N	47N	60N	72N	78N
1060	8	1		131E	05	22	050514	57S	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N
1061	9	1		103E	05	22	070042	57S	44S	31S	17S	4S	9N	22N	35N	48N	61N	72N	78N
1062	10	1		74E	05	22	090558	57S	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	78N
1063	11	1		45E	05	22	110103	57S	45S	31S	18S	5S	8N	21N	34N	47N	60N	72N	78N
1064	12	1		16E	05	22	130611	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1065	1	1		13W	05	22	150121	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N
1066	2	1		42W	05	22	160633	58S	46S	32S	19S	6S	7N	20N	33N	46N	59N	71N	78N
1067	3	1		70W	05	22	180146	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	78N
1068	4	1		99W	05	22	200702	59S	46S	33S	19S	6S	6N	20N	33N	46N	59N	71N	
1069	5	1		128W	05	22	220221	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	
1070	6	1		157W	05	23	000741	58S	46S	32S	19S	6S	7N	20N	33N	47N	59N		
1071	7	1		174E	05	23	020303	58S	45S	32S	19S	5S	7N	20N	34N	47N	60N	71N	78N
1072	8	1		146E	05	23	040828	58S	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N
1073	9	1		117E	05	23	060354	57S	45S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N
1074	10	1		88E	05	23	080923	57S	44S	31S	17S	4S	9N	22N	35N	48N	61N	72N	78N
1075	11	1		59E	05	23	100441	57S	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	78N
1076	12	1		30E	05	23	120946	57S	45S	31S	18S	5S	8N	21N	34N	47N	60N	72N	78N
1077	13	1		1E	05	23	140457	58S	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N	78N
1078	1	1		27W	05	23	160008	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1079	2	1		56W	05	23	170520	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N
1080	3	1		85W	05	23	190035	58S	46S	32S	19S	6S	7N	20N	34N	47N	59N	71N	
1081	4	1		114W	05	23	210553	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	
1082	5	1		143W	05	23	230112	58S	45S	32S	19S	5S	7N	20N	34N	47N	60N	71N	
1083	6	1		172W	05	24	010633	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1084	7	1		160E	05	24	030156	58S	45S	32S	18S	5S	8N	21N	34N	47N	60N	72N	78N
1085	8	1		131E	05	24	050722	57S	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N
1086	9	1		102E	05	24	070249	57S	44S	31S	17S	4S	9N	22N	35N	48N	61N	72N	78N
1087	10	1		73E	05	24	090805	57S	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	78N
1088	11	1		44E	05	24	110310	57S	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N
1089	12	1		16E	05	24	130816	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1090	1	1		13W	05	24	150328	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N
1091	2	1		42W	05	24	160840	58S	46S	32S	19S	6S	7N	20N	33N	46N	59N	71N	78N
1092	3	1		71W	05	24	180354	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	78N
1093	4	1		100W	05	24	200910	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	
1094	5	1		129W	05	24	220428	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	
1095	6	1		157W	05	25	000949	58S	46S	32S	19S	6S	7N	20N	33N	47N	59N		
1096	7	1		174E	05	25	020511	58S	45S	32S	19S	5S	7N	20N	34N	47N	60N	71N	78N
1097	8	1		145E	05	25	040035	58S	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N
1098	9	1		116E	05	25	060602	57S	45S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N

PASS	TRACK	C	S	ALON	MO	DA	HRMNSE	SUB-SATELLITE						POINT PICTURE LOCATION					
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	
1101	12	1	30E	05	25		120155	57S	44S	31S	18S	5S	8N	21N	34N	48N	60N	72N	78N
1102	13	1	1E	05	25		140703	58S	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N
1103	1	1	28W	05	25		160214	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1104	2	1	57W	05	25		170727	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N
1105	3	1	86W	05	25		190242	58S	46S	32S	19S	6S	7N	20N	34N	47N	59N	71N	78N
1106	4	1	113E	05	25		210759	59S	46S	33S	20S	6S	7S	21N	34N	37N	59N	72N	
1107	5	1	143W	05	25		230319	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	
1108	6	1	172W	05	26		010840	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1109	7	1	159E	05	26		030404	58S	45S	32S	18S	5S	8N	21N	34N	47N	60N	72N	78N
1110	8	1	130E	05	26		050929	57S	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N
1111	9	1	101E	05	26		070457	57S	44S	31S	17S	4S	9N	22N	35N	48N	61N	72N	78N
1112	10	1	73E	05	26		090014	57S	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	78N
1113	11	1	44E	05	26		110519	57S	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N
1114	12	1	15E	05	26		130027	58S	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N
1115	1	1	14W	05	26		150536	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N
1116	2	1	43W	05	26		170048	58S	46S	32S	19S	6S	7N	20N	33N	46N	59N	71N	78N
1117	3	1	71W	05	26		180602	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	78N
1118	4	1	100W	05	26		200118	59S	46S	33S	19S	6S	7N	20N	33N	46N	59N	71N	
1119	5	1	129W	05	26		220639	58S	46S	32S	19S	6S	7N	20N	33N	47N	59N	71N	
1120	6	1	158W	05	27		000159	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N		
1121	7	1	173E	05	27		020721	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1122	8	1	144E	05	27		040246	58S	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N	78N
1123	9	1	116E	05	27		060813	57S	44S	31S	18S	4S	8N	22N	35N	48N	61N	72N	78N
1124	10	1	87E	05	27		080341	57S	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N
1125	11	1	58E	05	27		100859	57S	44S	31S	17S	4S	9N	22N	35N	48N	61N	72N	78N
1126	12	1	29E	05	27		120405	57S	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N
1127	1	1	0W	05	27		140914	58S	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N
1128	2	1	28W	05	27		160425	58S	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N
1129	3	1	57W	05	27		170938	58S	45S	32S	19S	5S	7N	21N	34N	47N	59N	71N	78N
1130	4	1	86W	05	27		190453	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	
1131	5	1	115W	05	27		210010	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	
1132	6	1	144W	05	27		230531	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	
1133	7	1	173W	05	28		010052	58S	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N	78N
1134	8	1	159E	05	28		030616	57S	45S	31S	18S	5S	8N	21N	35N	48N	60N	72N	78N
1135	9	1	130E	05	28		050141	57S	44S	31S	18S	4S	8N	22N	35N	48N	61N	72N	78N
1136	10	1	101E	05	28		070709	57S	44S	30S	17S	4S	9N	22N	36N	49N	61N	72N	78N
1137	11	1	72E	05	28		090225	57S	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N
1138	12	1	43E	05	28		110731	57S	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N
1139	13	1	15E	05	28		130239	58S	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N	78N
1140	1	1	14W	05	28		150748	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1141	2	1	43W	05	28		170300	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N
1142	3	1	72W	05	28		180814	58S	46S	32S	19S	6S	7N	20N	33N	47N	59N	71N	78N
1143	4	1	101W	05	28		200334	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	
1144	5	1	130W	05	28		220852	58S	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	
1145	6	1	158W	05	29		000832	45S	32S	19S	5S	7N	21N	34N	47N	60N			
1146	7	1	173E	05	29		020354	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1147	8	1	144E	05	29		040919	45S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1148	9	1	115E	05	29		060446	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	78N	
1149	10	1	86E	05	29		080015	43S	30S	17S	3S	9N	22N	36N	49N	61N	73N	78N	
1150	11	1	57E	05	29		100532	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1151	12	1	29E	05	29		120038	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	78N	
1152	1	1	0W	05	29		140547	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1153	2	1	29W	05	29		160058	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1154	3	1	58W	05	29		180611	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N	
1155	4	1	87W	05	29		200126	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N		
1156	5	1	115W	05	29		210646	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N		
1157	6	1	144W	05	29		230205	45S	32S	18S	5S	8N	21N	34N	47N	60N			
1158	7	1	173W	05	30		010726	45S	31S	18S	5S	8N	21N	34N	48N	60N	72N	78N	
1159	8	1	158E	05	30		030250	44S	31S	18S	4S	8N	22N	35N	48N	61N	72N	78N	
1160	9	1	129E	05	30		050816	44S	31S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1161	10	1	100E	05	30		070343	43S	30S	17S	3S	9N	23N	36N	49N	61N	73N	78N	
1162	11	1	72E	05	30		090859	43S	30S	17S	3S	9N	22N	36N	49N	61N	72N	78N	
1163	12	1	43E	05	30		110405	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	78N	
1164	13	1	14E	05	30		130912	44S	31S	18S	4S	8N	21N	34N	48N	60N	72N	78N	
1165	1	1	15W	05	30		150422	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1166	2	1	44W	05	30		170934	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N	
1167	3	1	72W	05	30		190448	45S	32S	19S	5S	7N	21N	34N	47N	59N	71N	78N	
1168	4	1	101W	05	30		210004	45S	32S	19S	5S	7N	21N	34N	47N	59N	71N		
1169	5	1	130W	05	30		220522	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N		
1170	6	1	159W	05	31		000045	45S	32S	18S	5S	8N	21N	34N	47N	60N			
1171	7	1	172E	05	31		020607	45S	31S	18S	5S	8N	21N	34N	47N	60N	72N	78N	
1172	8	1	143E	05	31		040132	44S	31S	18S	4S	8N	22N	35N	48N	60N	72N	78N	
1173	9	1	115E	05	31		060659	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1174	10	1	86E	05	31		080228	43S	30S	16S	3S	9N	23N	36N	49N	62N	7		

PASS	TRACK	C	S	ALON	MO	DA	HRMNSE	SUB-SATELLITE			POINT			PICTURE		LOCATION			
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT		
1176	12	1		28E	05	31	120247	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	78N	
1177	1	1		1W	05	31	140754	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1178	2	1		30W	05	31	160303	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N	
1179	3	1		58W	05	31	180814	45S	32S	19S	5S	7N	21N	34N	47N	59N	71N	78N	
1180	4	1		67W	05	31	200327	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N	
1181	5	1		116W	05	31	210842	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1182	6	1		145W	05	31	230401	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1183	7	1		174W	06	01	010920	45S	32S	19S	5S	7N	21N	34N	47N	59N	71N	78N	
1184	8	1		158E	06	01	030442	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N	
1185	9	1		129E	06	01	050005	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1186	10	1		100E	06	01	070531	44S	31S	18S	4S	8N	22N	35N	48N	60N	72N	78N	
1187	11	1		71E	06	01	090059	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1188	12	1		42E	06	01	110615	44S	31S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1189	13	1		13E	06	01	130121	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1190	1	1		15W	06	01	150630	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1191	2	1		44W	06	01	170141	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N	
1192	3	1		73W	06	01	190654	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N	
1193	4	1		102W	06	01	210209	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1194	5	1		131W	06	01	220726	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1195	6	1		159W	06	02	000245	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1196	7	1		172E	06	02	020807	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N	
1197	8	1		143E	06	02	040330	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1198	9	1		114E	06	02	060855	44S	31S	18S	4S	8N	22N	35N	48N	60N	72N	78N	
1199	10	1		85E	06	02	080423	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1200	11	1		56E	06	02	100939	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	78N	
1201	12	1		28E	06	02	120446	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1202	1	1		1W	06	02	140955	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1203	2	1		30W	06	02	160506	45S	32S	19S	5S	7N	21N	34N	47N	59N	71N	78N	
1204	3	1		59W	06	02	180018	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N	
1205	4	1		88W	06	02	200533	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1206	5	1		117W	06	02	220051	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1207	6	1		145W	06	02	230610	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1208	7	1		173W	06	03	010711	59S	46S	33S	19S	5S	8N	21N	34N	47N	60N	71N	78N
1209	8	1		158E	06	03	030234	58S	45S	32S	19S	5S	8N	21N	35N	48N	60N	71N	78N
1210	9	1		128E	06	03	050220	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1211	10	1		99E	06	03	070748	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1212	11	1		71E	06	03	090304	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	78N	
1213	12	1		42E	06	03	110810	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1214	13	1		13E	06	03	130317	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N	
1215	1	1		16W	06	03	150827	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N	
1216	2	1		45W	06	03	170339	45S	32S	19S	6S	7N	20N	33N	46N	59N	71N	78N	
1217	3	1		74W	06	03	190853	46S	32S	19S	6S	7N	20N	33N	46N	59N	71N	78N	
1218	4	1		102W	06	03	210409	46S	32S	19S	6S	7N	20N	33N	46N	59N	71N		
1219	5	1		131W	06	03	230349	32S	19S	6S	7N	20N	34N	6N	60N	71N			
1220	6	1		160W	06	04	000449	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1221	7	1		171E	06	04	020012	45S	32S	19S	5S	7N	21N	34N	47N	60N	71N	78N	
1222	8	1		142E	06	04	040536	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1223	9	1		114E	06	04	060103	44S	31S	18S	4S	8N	22N	35N	48N	60N	72N	78N	
1224	10	1		85E	06	04	080632	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1225	11	1		56E	06	04	100149	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1226	12	1		27E	06	04	120655	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1227	1	1		2W	06	04	140204	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1228	2	1		31W	06	04	160715	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N	
1229	3	1		59W	06	04	180228	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N	
1230	4	1		88W	06	04	200743	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1231	5	1		117W	06	04	220300	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1232	6	1		146W	06	04	230821	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N		
1233	7	1		175W	06	05	010343	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1234	8	1		156E	06	05	030906	44S	31S	18S	5S	8N	21N	34N	47N	60N	72N	78N	
1235	9	1		128E	06	05	050432	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	78N	
1236	10	1		99E	06	05	070959	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1237	11	1		70E	06	05	090516	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1238	12	1		41E	06	05	110022	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1239	13	1		12E	06	05	130530	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1240	1	1		15W	06	05	150620	59S	46S	33S	19S	5S	7N	21N	34N	47N	60N	71N	78N
1241	2	1		44W	06	05	170133	59S	46S	32S	19S	6S	8N	21N	34N	47N	60N	71N	78N
1242	3	1		74W	06	05	190107	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N	
1243	4	1		103W	06	05	210624	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1244	5	1		132W	06	05	230142	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1245	6	1		161W	06	06	000708	45S	32S	18S	5S	8N	21N	34N	47N	60N			
1246	7	1		171E	06	06	020231	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1247	8	1		142E	06	06	040757	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1248	9	1		113E	06	06	060324	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1249	10	1		84E	06	06	080840	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1250	11	1		55E	06	06	100346	44S	31S	18S	4S	8N	21N	35N	48N	60N	71N	78N	

PASS	TRACK	C	S	ALON	MO	DA	HRMNSE	SUB-SATELLITE					POINT		PICTURE		LOCATION		
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	
1251	12	1		27E	06	06	120853	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1252	1	1		2W	06	06	140403	45S	32S	19S	5S	7N	21N	34N	47N	59N	71N	78N	
1253	2	1		31W	06	06	160915	45S	32S	19S	5S	7N	20N	33N	47N	59N	71N	78N	
1254	3	1		59W	06	06	180009	59S	46S	33S	20S	6S	8N	21N	34N	47N	59N	71N	78N
1255	4	1		87W	06	06	200525	59S	46S	33S	20S	6S	7N	21N	34N	47N	59N	71N	78N
1256	5	1		116W	06	06	220043	59S	46S	33S	20S	6S	7N	21N	34N	47N	59N	71N	78N
1257	6	1		146W	06	07	000027	45S	32S	19S	5S	7N	21N	34N	47N	59N	71N		
1258	7	1		175W	06	07	010550	45S	32S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1259	8	1		156E	06	07	030114	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1260	9	1		127E	06	07	050641	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	78N	
1261	10	1		98E	06	07	070210	43S	30S	17S	3S	9N	22N	36N	49N	61N	72N	78N	
1262	11	1		70E	06	07	090727	43S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1263	12	1		39E	06	07	110814	57S	44S	31S	18S	5S	8N	22N	35N	49N	61N	72N	78N
1264	13	1		13E	06	07	130522	58S	45S	32S	18S	5S	8N	22N	35N	48N	62N	72N	78N
1265	1	1		16W	06	07	150833	58S	45S	32S	19S	6S	7N	21N	34N	47N	60N	71N	78N
1266	2	1		45W	06	07	170346	58S	45S	32S	19S	6S	7N	21N	34N	47N	60N	71N	78N
1267	3	1		74W	06	07	190901	59S	46S	33S	19S	6S	8N	21N	34N	47N	60N	71N	78N
1268	4	1		102W	06	07	210418	59S	46S	33S	19S	6S	8N	21N	34N	47N	60N	71N	
1269	5	1		132W	06	07	230401	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N		
1270	6	1		160W	06	08	000502	58S	45S	32S	18S	5S	8N	21N	34N	47N	60N		
1271	7	1		170E	06	08	020446	44S	31S	18S	4S	8N	22N	35N	48N	60N	72N	78N	
1272	8	1		141E	06	08	040011	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1273	9	1		112E	06	08	060539	43S	30S	17S	3S	9N	23N	36N	49N	61N	72N	78N	
1274	10	1		84E	06	08	080055	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1275	11	1		55E	06	08	100601	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1276	12	1		26E	06	08	120108	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1277	1	1		2W	06	08	140158	58S	45S	32S	19S	5S	8N	21N	34N	47N	60N	71N	78N
1278	2	2		30W	06	08	160710	59S	46S	33S	19S	6S	7N	20N	34N	47N	60N	71N	77N
1279	3	1		59W	06	08	180224	59S	46S	33S	19S	6S	7N	21N	34N	47N	60N	71N	
1280	4	1		88W	06	08	200744	58S	45S	32S	19S	6S	7N	21N	34N	47N	60N	71N	
1281	5	1		117W	06	08	220302	58S	45S	32S	19S	6S	8N	21N	34N	47N	60N	71N	
1282	6	1		146W	06	08	230823	58S	45S	31S	19S	5S	8N	21N	34N	47N	60N	72N	
1283	7	1		176W	06	09	010806	44S	31S	18S	4S	8N	21N	34N	48N	60N	72N	78N	
1284	8	1		155E	06	09	030331	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1285	9	1		127E	06	09	050858	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1286	10	1		98E	06	09	070427	43S	30S	16S	3S	10N	23N	36N	49N	62N	73N	78N	
1287	11	1		69E	06	09	090943	43S	30S	16S	3S	9N	23N	36N	49N	61N	72N	78N	
1288	12	1		40E	06	09	110448	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1289	13	1		11E	06	09	130956	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1290	1	1		17W	06	09	150506	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1291	2	1		46W	06	09	170021	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1292	3	1		75W	06	09	190535	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1293	4	1		104W	06	09	210051	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N		
1294	5	1		133W	06	09	230609	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N		
1295	6	1		162W	06	10	010129	44S	31S	18S	5S	8N	21N	34N	47N	60N			
1296	7	1		170E	06	10	020652	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1297	8	1		141E	06	10	040216	44S	31S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1298	9	1		112E	06	10	060743	43S	30S	17S	3S	9N	22N	36N	49N	61N	72N	78N	
1299	10	1		83E	06	10	080258	43S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1300	11	1		54E	06	10	100802	44S	31S	18S	4S	8N	21N	35N	48N	60N	71N	78N	
1301	12	1		25E	06	10	120309	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1302	1	1		3W	06	10	140817	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N	
1303	2	1		32W	06	10	160328	45S	32S	19S	6S	7N	20N	33N	46N	59N	71N	78N	
1304	3	1		61W	06	10	180844	45S	32S	19S	6S	7N	20N	33N	46N	59N	71N	78N	
1305	4	1		90W	06	10	200401	45S	32S	19S	6S	7N	20N	33N	46N	59N	71N		
1306	5	1		119W	06	10	220919	45S	32S	19S	5S	7N	20N	33N	46N	59N	71N		
1307	6	1		147W	06	11	000436	45S	32S	19S	5S	7N	20N	33N	46N	59N	71N		
1308	7	1		176W	06	11	010958	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N	
1309	8	1		155E	06	11	030521	45S	32S	18S	5S	7N	21N	34N	47N	60N	71N	78N	
1310	9	1		126E	06	11	050047	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1311	10	1		97E	06	11	070615	44S	31S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1312	11	1		68E	06	11	090131	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1313	12	1		40E	06	11	110638	44S	31S	18S	5S	8N	21N	34N	47N	59N	71N	78N	
1314	13	1		11E	06	11	130147	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1315	1	1		18W	06	11	150658	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N	
1316	2	1		47W	06	11	170210	45S	32S	19S	6S	7N	20N	33N	46N	59N	71N	78N	
1317	3	1		76W	06	11	190728	45S	32S	19S	5S	7N	20N	33N	46N	59N	71N	78N	
1318	4	1		104W	06	11	210245	45S	32S	19S	5S	7N	20N	33N	46N	59N	71N		
1319	5	1		133W	06	11	230805	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1320	6	1		162W	06	12	010326	45S	32S	18S	5S	7N	21N	34N	47N	59N			
1321	7	1		169E	06	12	020849	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1322	8	1		140E	06	12	040415	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1323	9	1		111E	06	12	060942	44S	30S	17S	4S	8N	22N	35N	48N	61N	72N	78N	
1324	10	1		83E	06	12	080458	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1325	11	1		54E	06	12	100004	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	

PASS	TRACK	C	S	ALON	MO	OA	HRMNSE	SUB-SATELLITE				POINT		PICTURE		LOCATION			
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	
1326	12	1		25E	06	12	120511	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1327	1	1		4W	06	12	140601	59S	46S	33S	19S	6S	7N	21N	34N	47N	59N	71N	78N
1328	2	1		33W	06	12	160533	45S	32S	19S	6S	7N	20N	33N	46N	59N	70N	78N	
1329	3	1		62W	06	12	180047	46S	32S	19S	6S	7N	20N	33N	46N	59N	70N	78N	
1330	4	1		90W	06	12	200606	45S	32S	19S	6S	7N	20N	33N	46N	59N	70N		
1331	5	1		119W	06	12	220124	45S	32S	19S	6S	7N	20N	33N	46N	59N	70N		
1332	6	1		148W	06	13	000645	45S	32S	19S	5S	7N	20N	33N	46N	59N	71N		
1333	7	1		177W	06	13	020207	45S	32S	19S	5S	7N	21N	34N	47N	59N	71N	78N	
1334	8	1		154E	06	13	030732	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1335	9	1		126E	06	13	050258	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1336	10	1		97E	06	13	070827	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1337	11	1		68E	06	13	090344	44S	30S	17S	4S	9N	22N	35N	48N	60N	72N	78N	
1338	12	1		39E	06	13	110851	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1339	13	1		10E	06	13	130359	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1340	1	1		19W	06	13	150913	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1341	2	1		47W	06	13	170426	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1342	3	1		76W	06	13	190941	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N	
1343	4	1		105W	06	13	210459	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N		
1344	5	1		134W	06	13	230018	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N		
1345	6	1		163W	06	14	010539	45S	31S	18S	5S	8N	21N	34N	47N	60N			
1346	7	1		169E	06	14	030103	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1347	8	1		140E	06	14	040629	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1348	9	1		111E	06	14	060156	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1349	10	1		82E	06	14	080712	43S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1350	11	1		53E	06	14	100218	44S	31S	18S	4S	8N	21N	35N	48N	60N	71N	78N	
1351	12	1		24E	06	14	120728	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1352	1	1		4W	06	14	140239	45S	31S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1353	2	1		33W	06	14	160751	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1354	3	1		62W	06	14	180305	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N	
1355	4	1		91W	06	14	200822	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1356	5	1		120W	06	14	220341	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N		
1357	6	1		149W	06	15	000901	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N		
1358	7	1		177W	06	15	020424	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1359	8	1		154E	06	15	030949	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1360	9	1		125E	06	15	050516	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1361	10	1		96E	06	15	070045	43S	30S	16S	3S	9N	23N	36N	49N	61N	72N	78N	
1362	11	1		67E	06	15	090602	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1363	12	1		39E	06	15	110111	43S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1364	13	1		10E	06	15	130620	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1365	1	1		19W	06	15	150131	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1366	2	1		48W	06	15	170644	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1367	3	1		77W	06	15	190159	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1368	4	1		106W	06	15	210716	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N		
1369	5	1		134W	06	15	230236	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N		
1370	6	1		163W	06	16	010757	44S	31S	18S	4S	8N	21N	35N	48N	60N			
1371	7	1		168E	06	16	030321	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1372	8	1		139E	06	16	040846	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1373	9	1		110E	06	16	060414	43S	30S	16S	3S	9N	23N	36N	49N	61N	73N	78N	
1374	10	1		82E	06	16	080930	43S	30S	16S	3S	9N	22N	36N	49N	61N	72N	78N	
1375	11	1		53E	06	16	100436	43S	30S	17S	4S	9N	22N	35N	48N	60N	72N	78N	
1376	12	1		24E	06	16	120943	44S	31S	18S	4S	8N	21N	35N	48N	60N	71N	78N	
1377	1	1		5W	06	16	140453	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1378	2	1		34W	06	16	160005	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1379	3	1		63W	06	16	180519	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1380	4	1		91W	06	16	200035	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N		
1381	5	1		120W	06	16	220553	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N		
1382	6	1		149W	06	17	000116	44S	31S	18S	5S	8N	21N	34N	47N	60N			
1383	7	1		178W	06	17	020638	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1384	8	1		153E	06	17	040203	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1385	9	1		125E	06	17	050730	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1386	10	1		96E	06	17	070259	43S	29S	16S	3S	10N	23N	36N	49N	62N	73N	78N	
1387	11	1		67E	06	17	090815	43S	30S	16S	3S	9N	23N	36N	49N	61N	72N	78N	
1388	12	1		38E	06	17	110321	43S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1389	13	1		9E	06	17	130829	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1390	1	1		20W	06	17	150339	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1391	2	1		48W	06	17	170851	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1392	3	1		77W	06	17	190404	45S	31S	18S	5S	8N	21N	34N	47N	59N	71N		
1393	4	1		106W	06	17	210921	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N		
1394	5	1		135W	06	17	230439	43S	30S	17S	3S	9N	22N	35N	48N	61N			
1395	6	1		164W	06	18	010000	44S	31S	18S	5S	8N	21N	34N	47N	60N			
1396	7	1		167E	06	18	030523	44S	31S	18S	4S	8N	21N	35N	48N	60N	71N	78N	
1397	8	1		139E	06	18	050048	44S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1398	9	1		110E	06	18	060615	43S	30S	17S	3S	9N	22N	36N	48N	61N	72N	78N	
1399	10	1		81E	06	18	080130	43S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1400	11	2		52E	06	18	100625	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	

PASS	TRACK	C	S	ALON	MO	DA	HRMNSE	SUB-SATELLITE						POINT		PICTURE		LOCATION	
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	
1401	12	2		23E	06	18	120133	45S	32S	18S	5S	7N	20N	34N	47N	59N	71N	78N	
1402	1	2		5W	06	18	140643	45S	32S	19S	5S	7N	20N	33N	46N	59N	70N	78N	
1403	2	2		34W	06	18	160156	45S	32S	19S	6S	7N	20N	33N	46N	59N	70N	78N	
1404	3	2		63W	06	18	180710	46S	32S	19S	6S	7N	20N	33N	46N	59N	70N	78N	
1405	4	2		92W	06	18	200227	46S	32S	19S	6S	7N	20N	33N	46N	59N	70N		
1406	5	2		121W	06	18	220746	45S	32S	19S	6S	7N	20N	33N	46N	59N	70N		
1407	6	2		150W	06	19	000307	45S	32S	19S	5S	7N	20N	33N	46N				
1408	7	2		178W	06	19	020830	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N	78N	
1409	8	2		153E	06	19	040355	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1410	9	2		124E	06	19	050922	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1411	10	2		95E	06	19	070438	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1412	11	2		66E	06	19	090944	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1413	12	2		38E	06	19	110453	45S	32S	19S	5S	7N	20N	33N	46N	59N	70N	78N	
1414	13	2		9E	06	19	130003	45S	32S	19S	6S	7N	20N	33N	46N	59N	70N	78N	
1415	1	2		20W	06	19	150516	46S	33S	19S	6S	6N	20N	33N	46N	58N	70N	78N	
1416	2	2		49W	06	19	170031	46S	33S	19S	6S	6N	20N	33N	46N	58N	70N	78N	
1417	3	2		78W	06	19	190548	46S	33S	19S	6S	6N	20N	33N	46N	58N	70N	78N	
1418	4	2		107W	06	19	210107	46S	33S	19S	6S	6N	20N	33N	46N	58N	70N		
1419	5	2		135W	06	19	230628	45S	32S	19S	6S	7N	20N	33N	46N	59N	70N		
1420	6	2		164W	06	20	010734	58S	45S	32S	19S	6S	8N	21N	34N	47N	60N		
1421	7	2		167E	06	20	030720	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1422	8	2		138E	06	20	050248	44S	31S	18S	4S	8N	21N	35N	48N	60N	72N	78N	
1423	9	2		109E	06	20	060818	43S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1424	0	2		80E	06	20	080335	43S	30S	17S	4S	9N	22N	35N	48N	60N	72N	78N	
1425	11	2		52E	06	20	100841	44S	31S	18S	4S	9N	21N	34N	47N	60N	71N	78N	
1426	12	2		23E	06	20	120349	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1427	1	2		5W	06	20	140439	58S	45S	32S	19S	5S	8N	21N	34N	47N	60N	71N	78N
1428	2	2		34W	06	20	160951	58S	46S	33S	19S	5S	8N	21N	34N	47N	60N	71N	78N
1429	3	2		64W	06	20	180925	45S	32S	19S	5S	7N	20N	33N	46N	59N	70N	78N	
1430	4	2		92W	06	20	200441	45S	32S	19S	5S	7N	20N	33N	46N	59N	70N		
1431	5	2		120W	06	20	220539	59S	46S	33S	19S	6S	MN	21N	34N	47N	60N	71N	
1432	6	2		150W	06	21	000523	45S	46N	46S	47N	46S	47N	47S	48N	48S	49N		
1433	7	2		179W	06	21	020046	45S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1434	8	2		152E	06	21	040611	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1435	9	2		123E	06	21	060138	44S	30S	17S	4S	9N	22N	35N	48N	60N	72N	78N	
1436	10	2		95E	06	21	070707	43S	30S	17S	3S	9N	22N	36N	49N	61N	72N	78N	
1437	11	2		66E	06	21	090223	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1438	12	2		37E	06	21	110729	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1439	13	2		8E	06	21	130237	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1440	1	2		21W	06	21	150747	44S	31S	18S	5S	8N	21N	34N	47N	59N	71N	78N	
1441	2	2		49W	06	21	170259	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1442	3	2		78W	06	21	190813	45S	32S	18S	5S	7N	20N	34N	47N	59N	71N	78N	
1443	4	2		107W	06	21	210329	45S	32S	19S	5S	7N	20N	34N	47N	59N	71N		
1444	5	2		136W	06	21	230848	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N		
1445	6	2		165W	06	22	010410	45S	31S	18S	5S	8N	21N	34N	47N	59N			
1446	7	2		166E	06	22	030932	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1447	8	2		138E	06	22	050457	44S	31S	17S	4S	8N	21N	35N	48N	60N	72N	78N	
1448	9	2		109E	06	22	070024	43S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1449	10	2		80E	06	22	080540	43S	30S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1450	11	2		51E	06	22	100046	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1451	12	2		22E	06	22	120554	45S	31S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1452	1	2		7W	06	22	140103	45S	32S	19S	5S	7N	20N	33N	46N	59N	71N	78N	
1453	2	2		35W	06	22	160615	45S	32S	19S	5S	7N	20N	33N	46N	59N	70N	78N	
1454	3	2		64W	06	22	180130	45S	32S	19S	6S	6S	7N	20N	33N	46N	59N	70N	78N
1455	4	2		93W	06	22	200646	45S	32S	19S	6S	7N	20N	33N	46N	59N	70N		
1456	5	2		121W	06	22	220744	59S	46S	33S	19S	6S	7N	21N	34N	46N	59N	71N	
1457	6	2		151W	06	23	000725	45S	32S	19S	5S	7N	20N	33N	46N	59N			
1458	7	2		179W	06	23	020248	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1459	8	2		152E	06	23	040812	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1460	9	2		124E	06	23	050919	58S	44S	31S	18S	4S	9N	22N	35N	48N	61N	72N	78N
1461	10	2		95E	06	23	070448	58S	44S	31S	17S	4S	9N	23N	36N	48N	61N	72N	78N
1462	11	2		65E	06	23	090426	43S	30S	17S	4S	9N	22N	35N	48N	60N	72N	78N	
1463	12	2		36E	06	23	110933	44S	31S	17S	4S	8N	21N	35N	47N	60N	71N	78N	
1464	13	2		8E	06	23	130441	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1465	1	2		21W	06	23	150952	45S	31S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1466	2	2		50W	06	23	170505	45S	32S	18S	5S	7N	20N	34N	47N	59N	71N	78N	
1467	3	2		79W	06	23	190020	45S	32S	18S	5S	7N	20N	34N	46N	59N	71N	78N	
1468	4	2		108W	06	23	210538	45S	32S	18S	5S	7N	20N	34N	47N	59N	71N		
1469	5	2		136W	06	23	230057	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N		
1470	6	2		165W	06	24	010620	44S	31S	18S	5S	8N	21N	34N	47N	60N			
1471	7	2		166E	06	24	030144	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1472	8	2		137E	06	24	050710	44S	30S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1473	9	2		108E	06	24	070238	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1474	10	2		79E	06	24	080755	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1475	11	2		51E	06	24	100300	44S	31S	17S	4S	8N	21N	35N	47N	60N	71N	78N	

PASS	TRACK	C	S	ALON	MO	DA	HRMNSE	SUB-SATELLITE						POINT		PICTURE		LOCATION	
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
1476	12	2		22E	06	24	120808	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1477	1	2		7W	06	24	140318	45S	31S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1478	2	2		36W	06	24	160830	45S	32S	18S	5S	7N	20N	34N	47N	59N	71N	78N	
1479	3	2		65W	06	24	180344	45S	32S	19S	5S	7N	20N	33N	46N	59N	71N	78N	
1480	4	2		32W	06	24	200440	58S	45S	32S	19S	6S	8N	21N	34N	47N	59N	71N	78N
1481	5	2		122W	06	24	220418	45S	32S	19S	5S	7N	20N	33N	46N	59N	71N	78N	
1482	6	2		151W	06	25	000939	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1483	7	2		179W	06	25	020042	58S	45S	32S	5S	8N	21N	34N	47N	60N	71N	78N	
1484	8	2		151E	06	25	040026	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1485	9	2		122E	06	25	060553	44S	30S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1486	10	2		94E	06	25	080122	43S	30S	17S	3S	9N	22N	36N	48N	61N	72N	78N	
1487	11	2		65E	06	25	090640	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1488	12	2		36E	06	25	110146	44S	30S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1489	13	2		7E	06	25	130654	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1490	1	2		22W	06	25	150204	44S	31S	18S	5S	8N	21N	34N	47N	59N	71N	78N	
1491	2	2		51W	06	25	170717	45S	31S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1492	3	2		79W	06	25	190231	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1493	4	2		108W	06	25	210748	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1494	5	2		137W	06	25	230307	45S	31S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1495	6	2		166W	06	26	010829	44S	31S	18S	5S	8N	21N	34N	47N	60N			
1496	7	2		165E	06	26	030352	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1497	8	2		137E	06	26	050918	44S	30S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1498	9	2		108E	06	26	070445	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1499	10	2		79E	06	26	090001	43S	30S	17S	4S	9N	22N	35N	48N	60N	72N	78N	
1500	11	2		50E	06	26	100506	44S	31S	17S	4S	8N	21N	34N	47N	60N	71N	78N	
1501	12	2		21E	06	26	120014	44S	31S	18S	5S	8N	21N	34N	47N	59N	71N	78N	
1502	1	2		8W	06	26	140524	45S	31S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1503	2	2		36W	06	26	160036	45S	32S	19S	5S	7N	20N	33N	46N	59N	71N	78N	
1504	3	2		65W	06	26	180550	45S	32S	19S	5S	7N	20N	33N	46N	59N	70N	78N	
1505	4	2		94W	06	26	200106	45S	32S	19S	5S	7N	20N	33N	46N	59N	70N		
1506	5	2		123W	06	26	220624	45S	32S	19S	5S	7N	20N	33N	46N	59N	70N		
1507	6	2		152W	06	27	000146	45S	32S	18S	5S	7N	20N	34N	47N	59N	71N		
1508	7	2		179E	06	27	020709	44S	31S	18S	5S	8N	21N	34N	47N	59N	71N	78N	
1509	8	2		151E	06	27	040234	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1510	9	2		122E	06	27	060802	44S	30S	17S	4S	9N	22N	35N	48N	60N	72N	78N	
1511	10	2		93E	06	27	080331	43S	30S	16S	3S	9N	22N	36N	48N	61N	72N	78N	
1512	11	2		64E	06	27	090848	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1513	12	2		35E	06	27	110355	43S	30S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1514	13	2		7E	06	27	130903	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1515	1	2		22W	06	27	150414	44S	31S	18S	5S	8N	21N	34N	47N	60N	71N	78N	
1516	2	2		51W	06	27	170927	44S	31S	18S	5S	8N	21N	34N	47N	59N	71N	78N	
1517	3	2		80W	06	27	190442	45S	31S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1518	4	2		109W	06	27	210959	45S	31S	18S	5S	7N	21N	34N	47N	59N	71N		
1519	5	2		138W	06	27	230519	44S	31S	18S	5S	8N	21N	34N	47N	59N	71N		
1520	6	2		166W	06	28	010042	44S	31S	18S	4S	8N	21N	34N	47N	60N			
1521	7	2		165E	06	28	030606	44S	31S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1522	8	2		136E	06	28	050132	43S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1523	9	2		107E	06	28	070700	43S	30S	16S	3S	9N	23N	36N	49N	61N	72N	78N	
1524	10	2		78E	06	28	090216	43S	30S	16S	3S	9N	22N	35N	48N	61N	72N	78N	
1525	11	2		50E	06	28	100721	43S	30S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1526	12	2		21E	06	28	120229	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1527	1	2		8W	06	28	140739	44S	31S	18S	5S	8N	21N	34N	47N	59N	71N	78N	
1528	2	2		37W	06	28	160251	44S	31S	18S	5S	7N	21N	34N	47N	59N	71N	78N	
1529	3	2		66W	06	28	180804	45S	32S	18S	5S	7N	20N	34N	47N	59N	71N	78N	
1530	4	2		95W	06	28	200321	45S	32S	18S	5S	7N	20N	34N	47N	59N	71N		
1531	5	2		123W	06	28	220839	45S	32S	18S	5S	7N	21N	34N	47N	59N	71N		
1532	6	2		152W	06	29	000403	44S	31S	18S	5S	8N	21N	34N	47N	60N			
1533	7	2		179E	06	29	020926	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1534	8	2		150E	06	29	040451	44S	30S	17S	4S	8N	22N	35N	48N	60N	72N	78N	
1535	9	2		121E	06	29	060018	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1536	10	2		93E	06	29	080548	42S	29S	16S	3S	10N	23N	36N	49N	61N	73N	78N	
1537	11	2		64E	06	29	100105	42S	29S	16S	3S	9N	23N	36N	49N	61N	72N	78N	
1538	12	2		35E	06	29	110611	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	
1539	13	2		6E	06	29	130121	43S	30S	17S	4S	9N	22N	35N	48N	60N	72N	78N	
1540	1	2		23W	06	29	150632	44S	31S	17S	4S	8N	21N	35N	47N	60N	71N	78N	
1541	2	2		52W	06	29	170145	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1542	3	2		80W	06	29	190701	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N	
1543	4	2		109W	06	29	210218	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N		
1544	5	2		138W	06	29	230738	44S	31S	17S	4S	8N	21N	35N	47N	60N	71N		
1545	6	2		167W	06	30	010300	44S	30S	17S	4S	8N	22N	35N	48N	60N			
1546	7	2		164E	06	30	030824	43S	30S	17S	4S	9N	22N	35N	48N	61N	72N	78N	
1547	8	2		135E	06	30	050350	43S	30S	16S	3S	9N	22N	36N	49N	61N	72N	78N	
1548	9	2		107E	06	30	070918	42S	29S	16S	2S	10N	23N	36N	49N	62N	73N	78N	
1549	10	2		78E	06	30	090433	42S	29S	16S	3S	10N	23N	36N	49N	61N	72N	78N	
1550	11	2		49E	06	30	100937	43S	30S	17S	3S	9N	22N	35N	48N	61N	72N	78N	

PASS	TRACK	C	S	ALON	MO	DA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION										
								LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
1551	12	2		20E	06	30	120444	43S	30S	17S	4S	8N	22N	35N	48N	60N	71N	78N
1552	1	2		9W	06	30	140953	44S	31S	18S	4S	8N	21N	34N	47N	60N	71N	78N
1553	2	2		37W	06	30	160503	44S	31S	18S	5S	8N	21N	34N	47N	59N	71N	78N
1554	3	2		66W	06	30	180016	44S	31S	18S	5S	7N	21N	34N	47N	59N	71N	78N
1555	4	2		95W	06	30	200531	45S	31S	18S	5S	7N	21N	34N	47N	59N	71N	
1556	5	2		124W	06	30	220051	44S	31S	18S	5S	7N	21N	34N	47N	59N	71N	78N

TABLE 1
TRACK TABLE FOR ESSA 9

<u>Range of Ascending Nodes</u>	<u>Track No.</u>
0 - 28.8W	1
28.8W - 57.6W	2
57.6W - 86.4W	3
86.4W - 115.2W	4
115.2W - 144.0W	5
144.0W - 172.8W	6
172.8W - 158.4E	7
158.4E - 129.6E	8
129.6E - 100.8E	9
100.8E - 72.0E	10
72.0E - 43.2E	11
43.2E - 14.4E	12
14.4E - 0	13

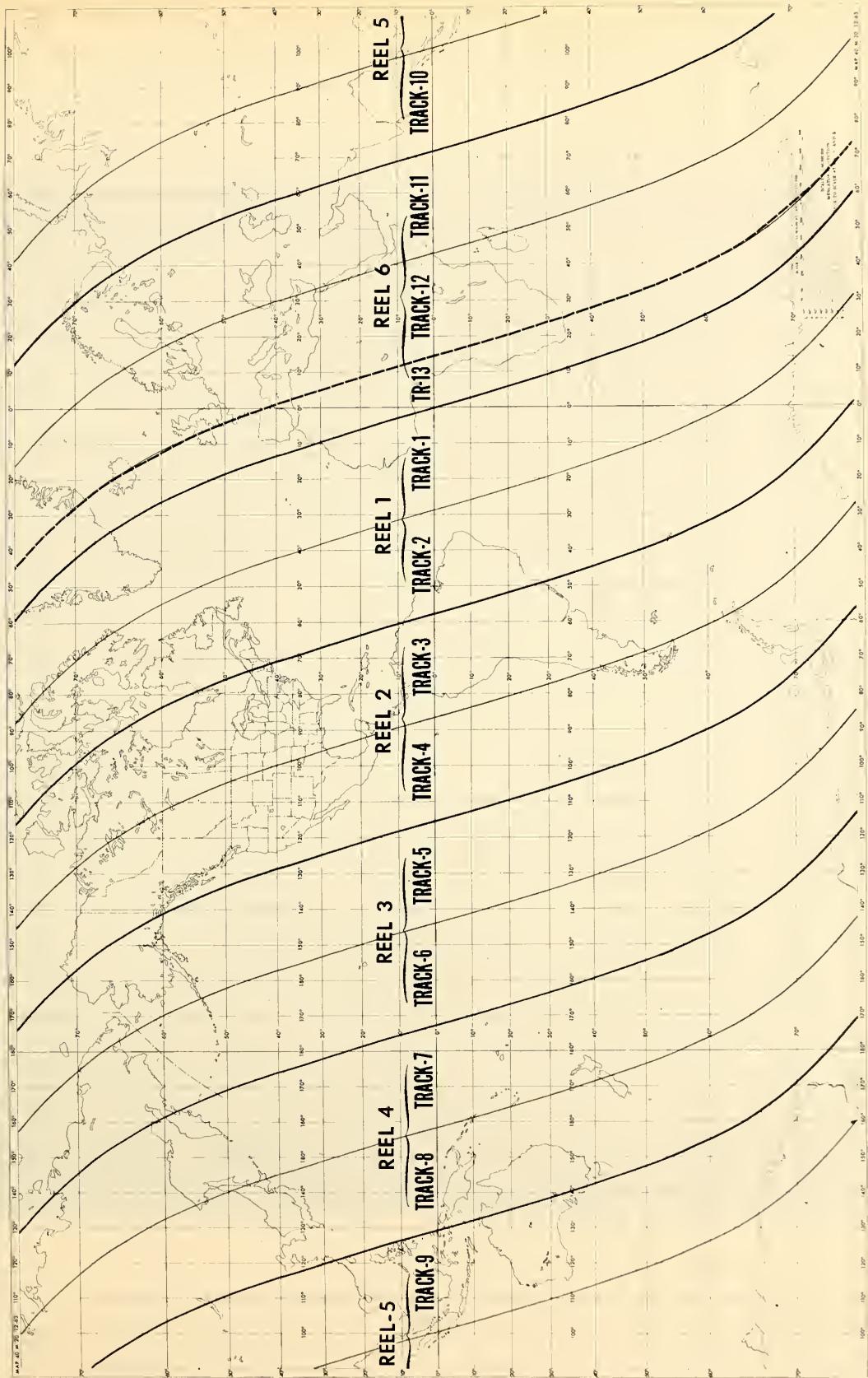
Difference between Tracks - 28.8°

Day to day variations and irregularities which result in improper locating or display of the data are apparent in this catalog. At present, inadequate computer facilities prevent any effort to reformat the mosaic image on an after-the-fact basis. Those days with obvious problems are listed below in chronological order:

<u>DATE</u>	<u>REASON</u>
4/ 6/69	Northern and Southern Hemispheres contain garbled, noisy data due to CDA signal garble.
4/13/69	Pass missing at 70° E longitude.
4/29/69	Pass missing at 110° W longitude.
6/20/69	Computer contamination in area 50° N and 120° W.
6/23/69	No data available for Southern Hemisphere.

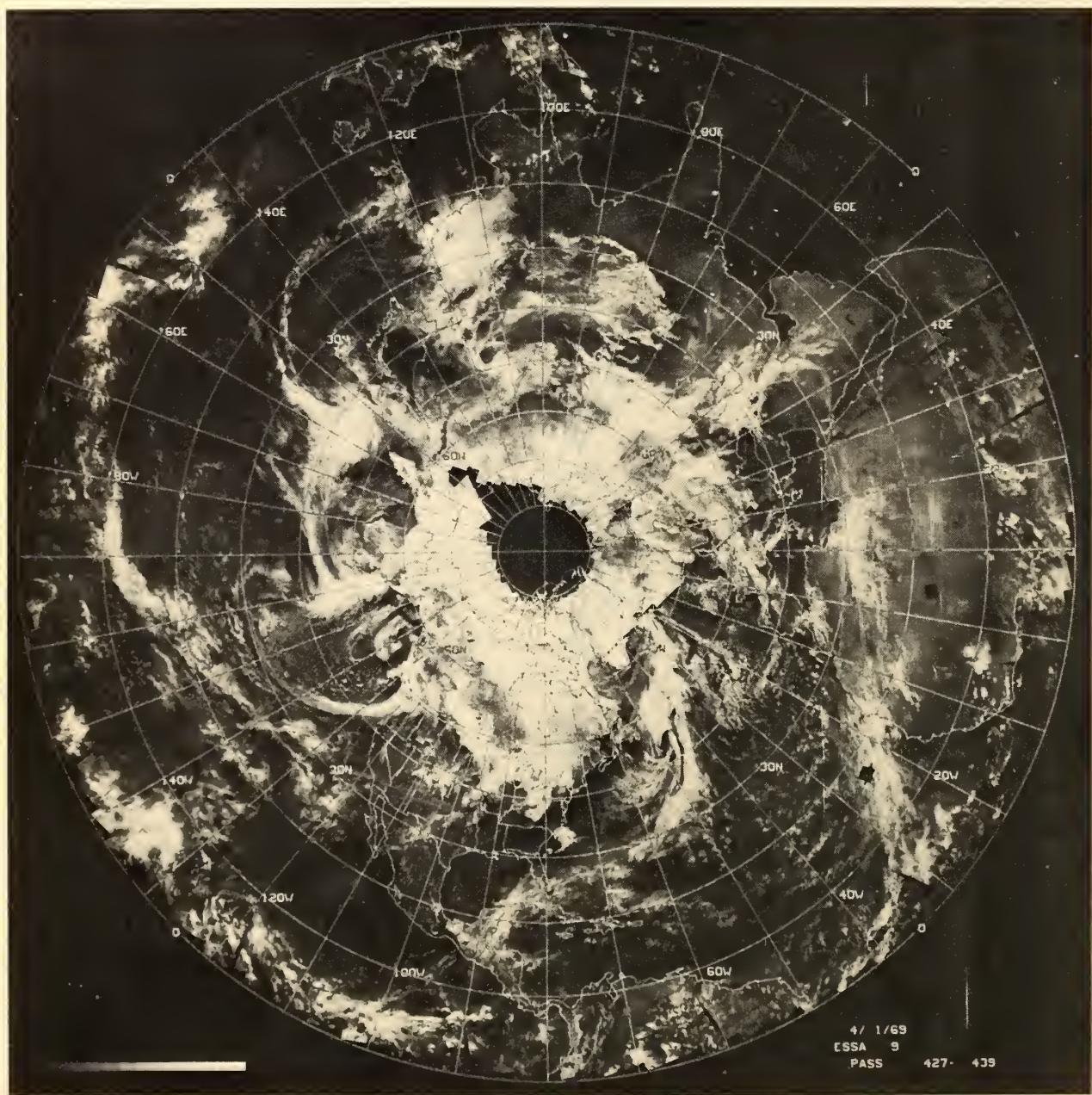
Some other inconsistencies are related to photography and printing problems. Original film negatives may not exhibit these problems. Any comments pertaining to the Catalog of Meteorological Satellite Data - ESSA 9 Television Cloud Photography, will be welcomed and should be addressed to:

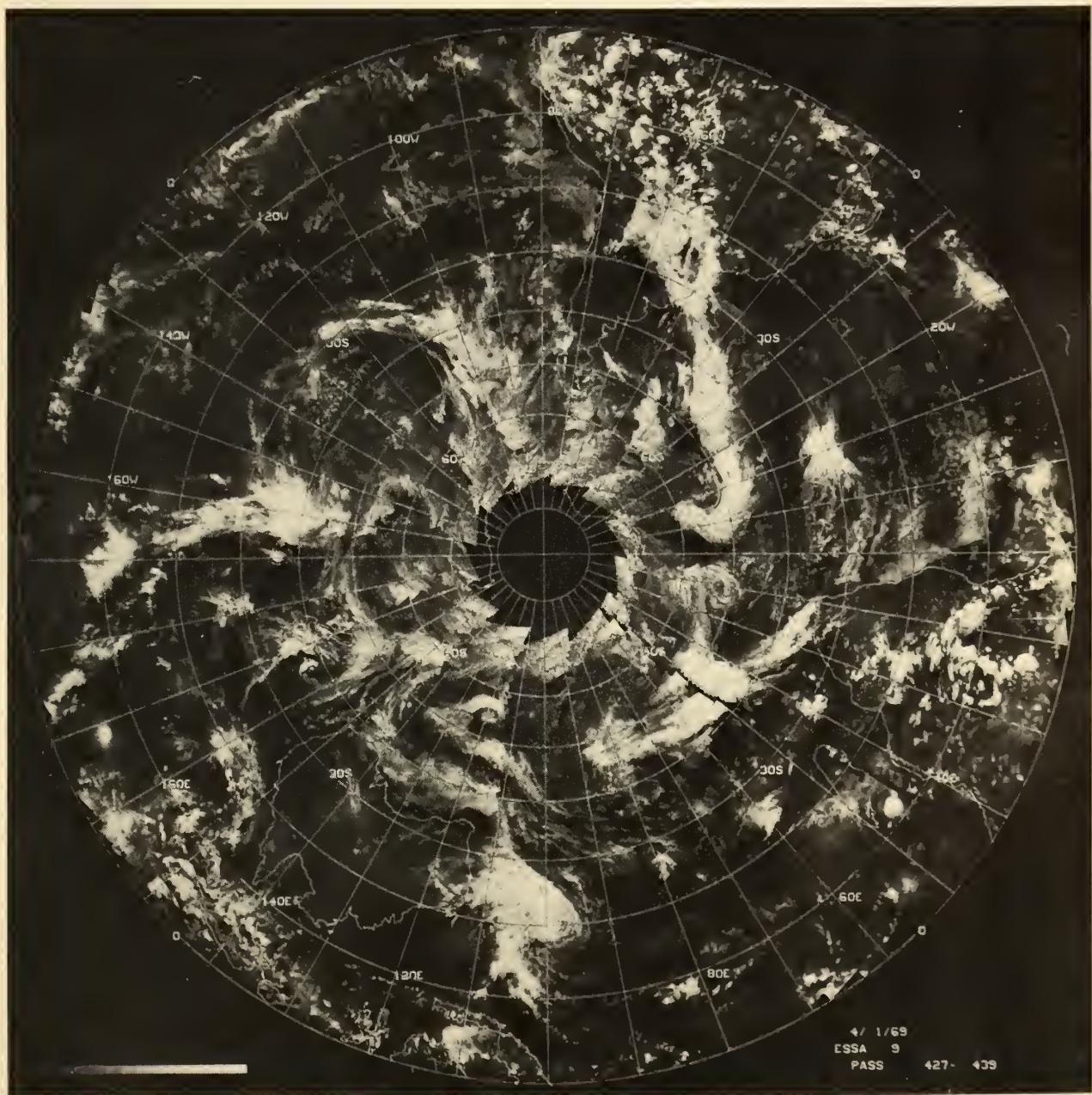
Chief, Documentation Section
National Environmental Satellite Service
National Oceanic and Atmospheric Administration
Washington, D.C. 20233

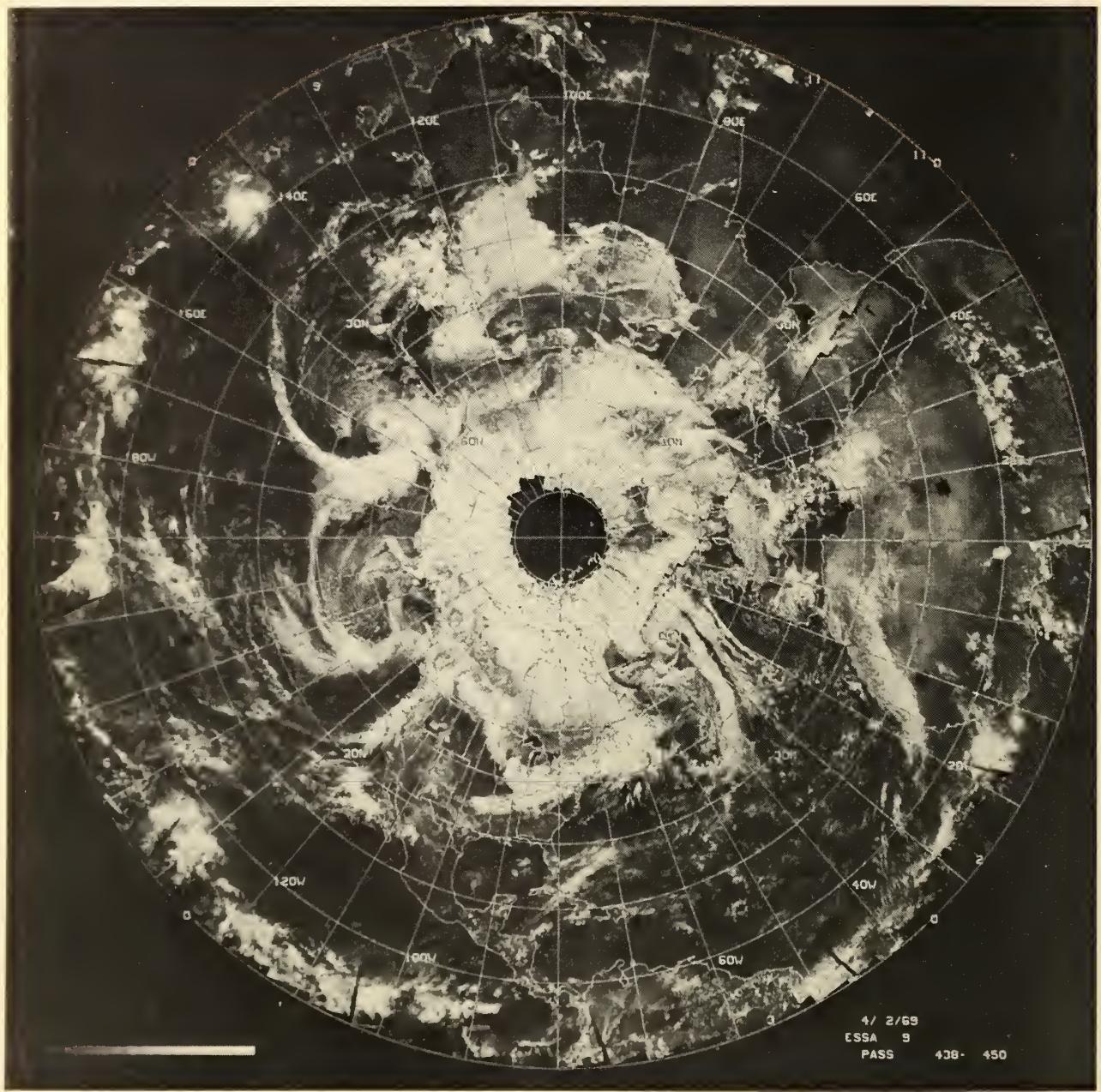


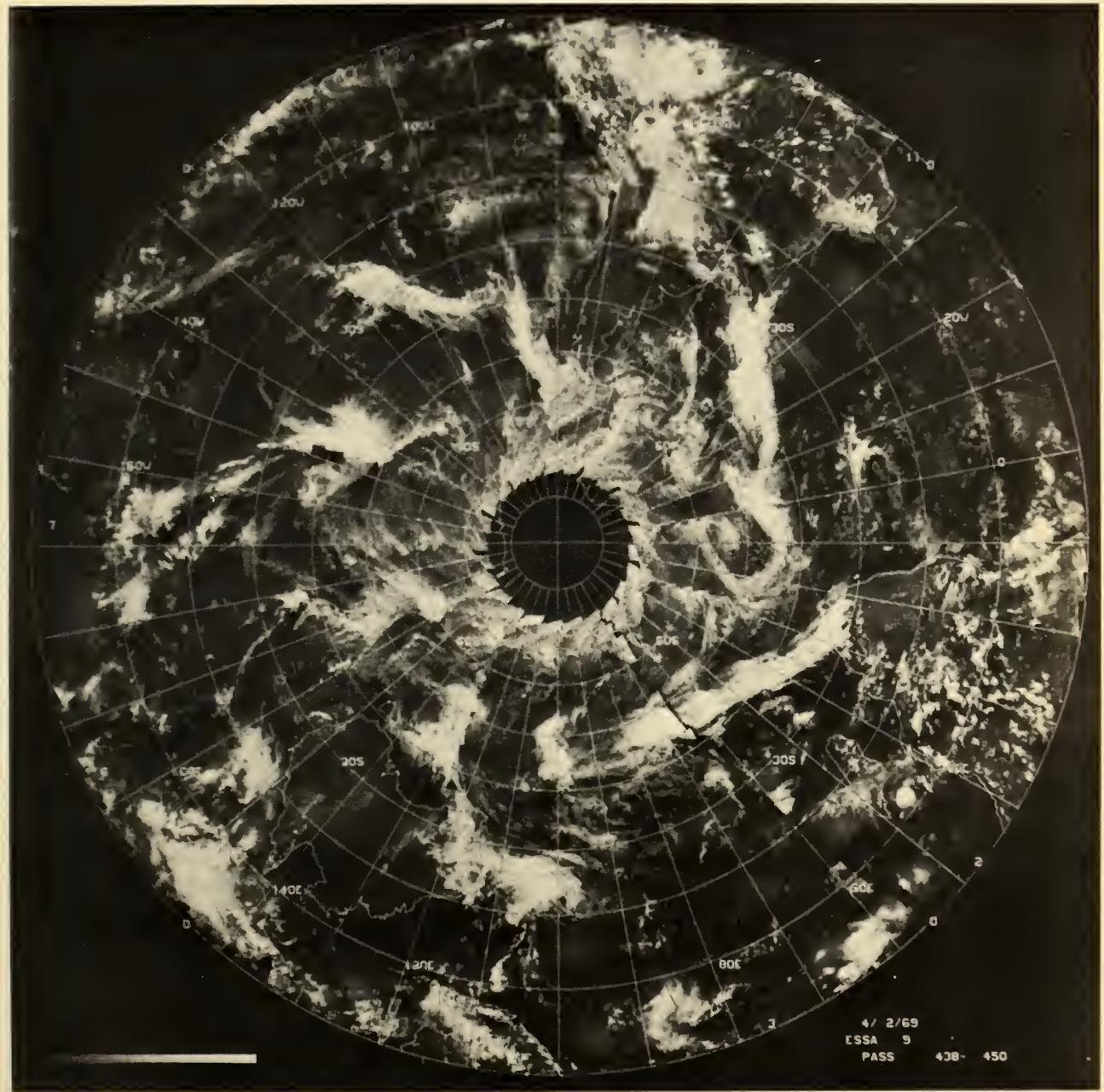
ESSA-9
TRACK AND REEL NUMBERS

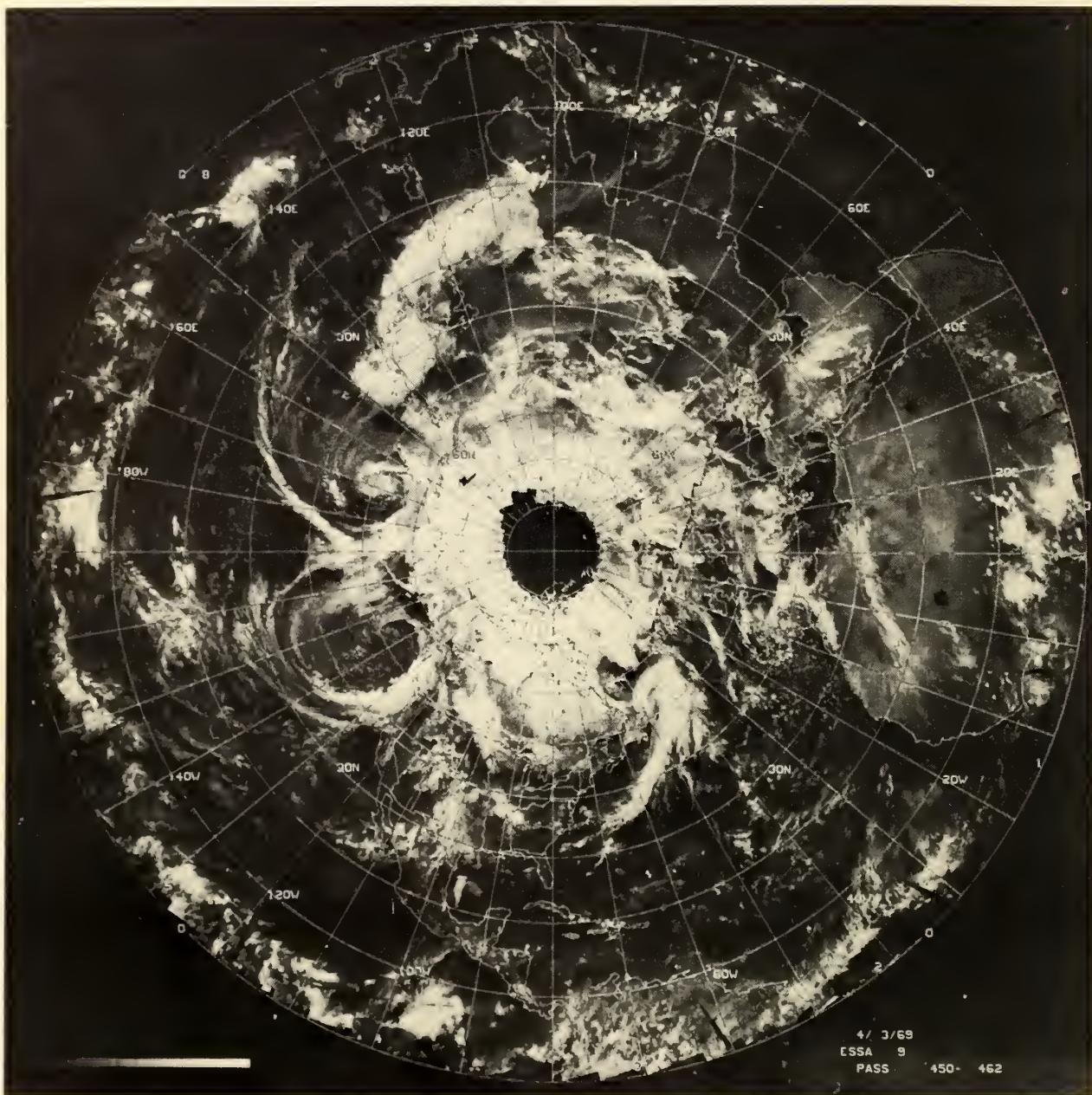
Figure 2

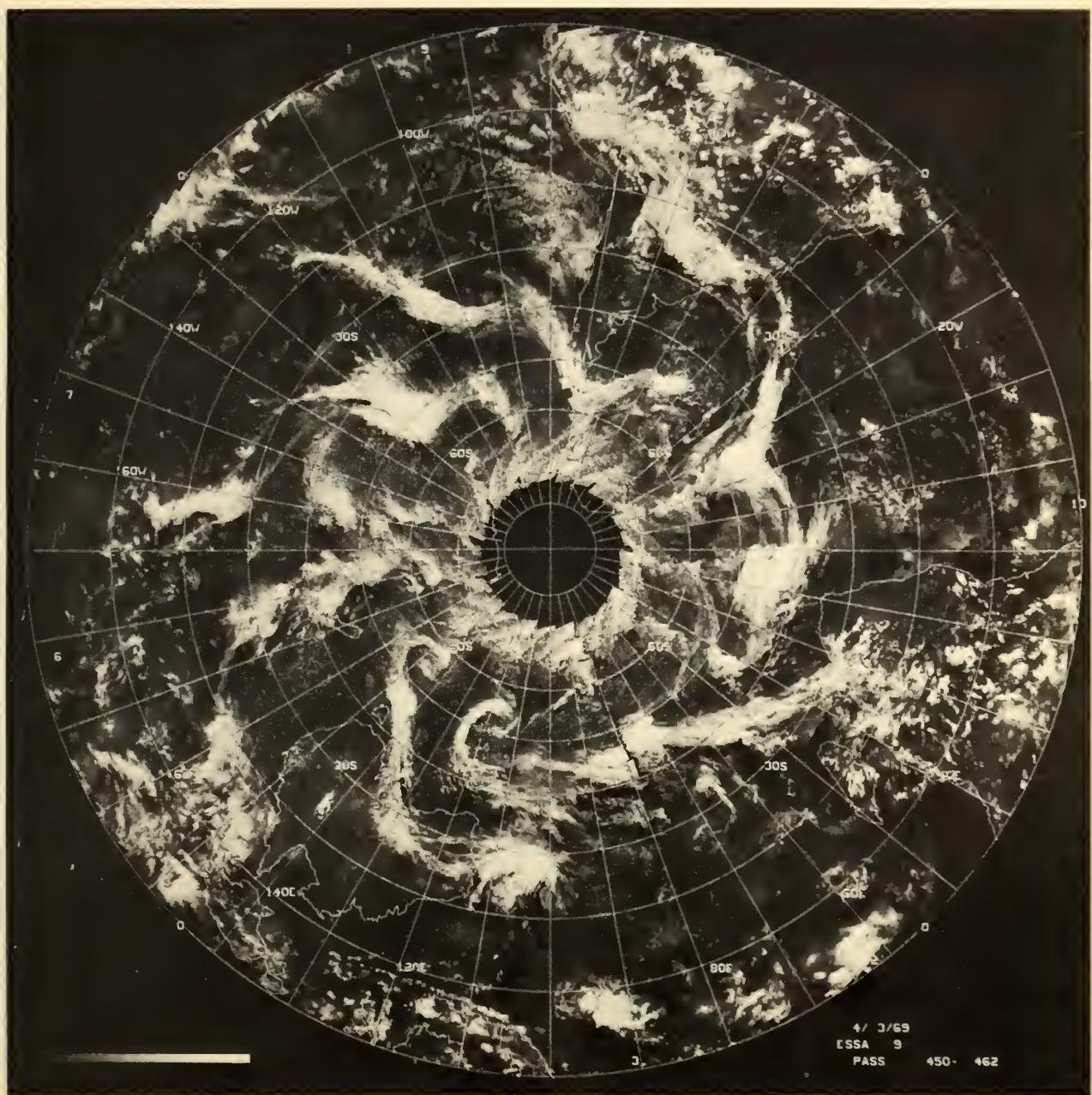


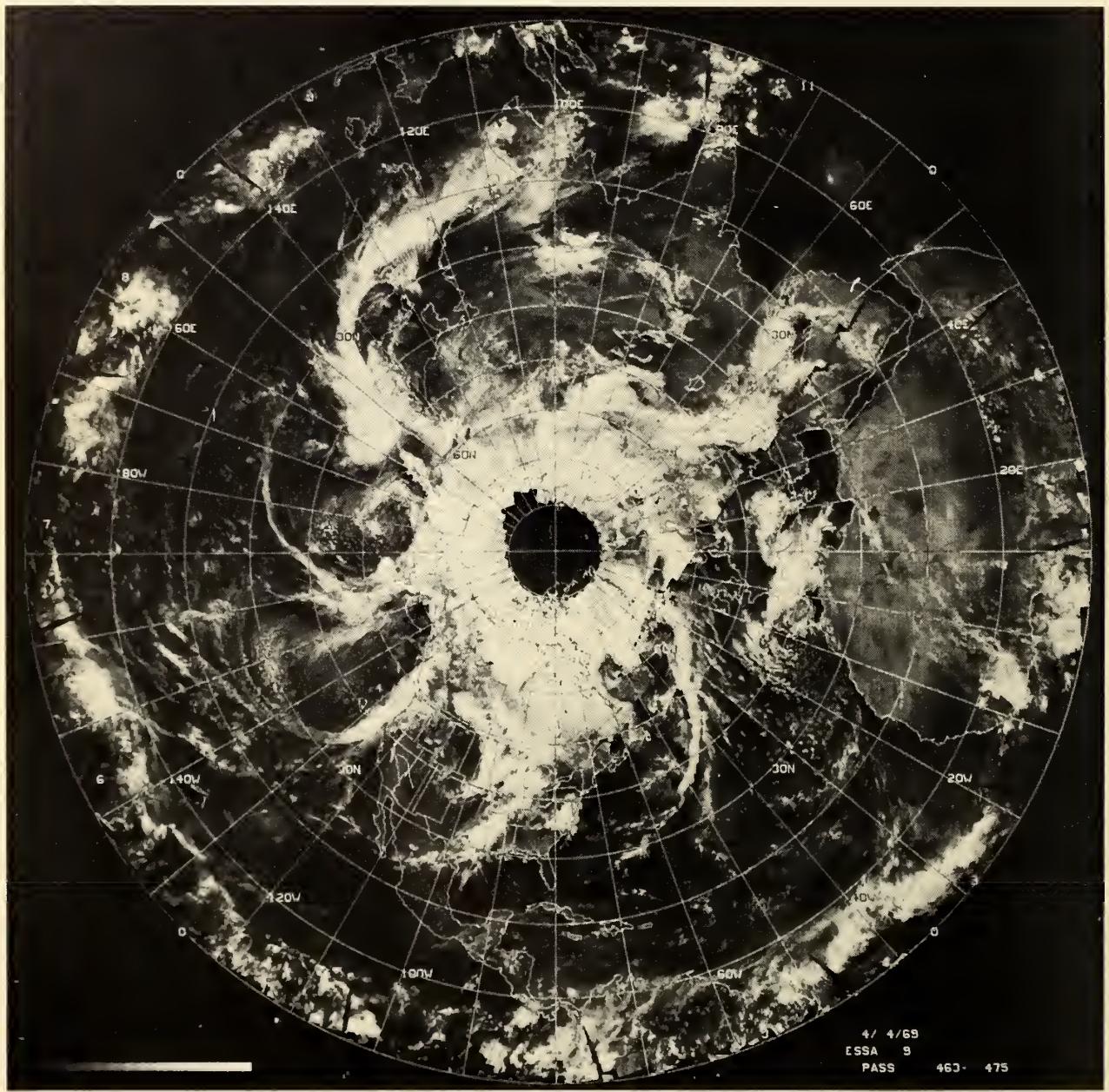


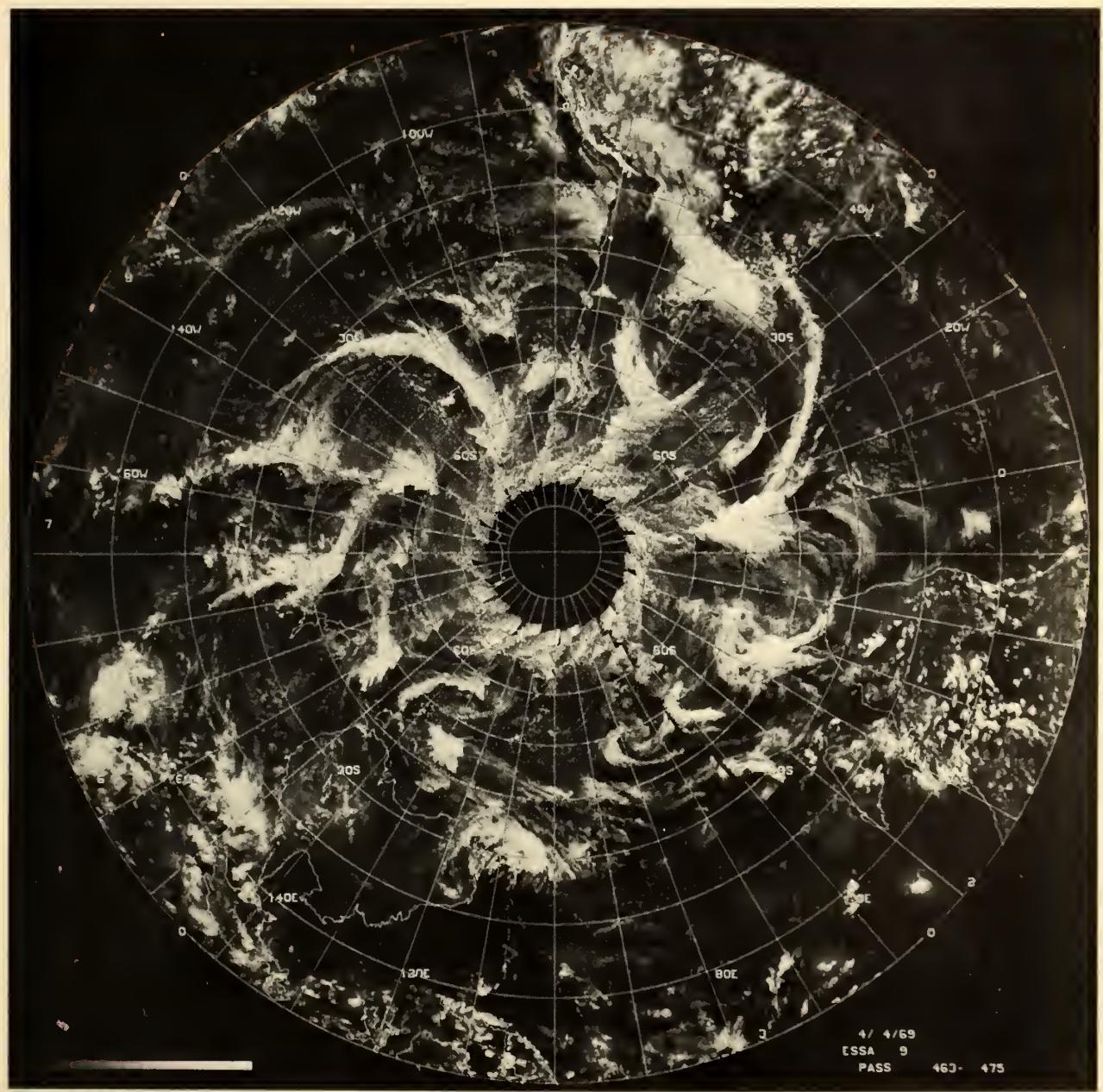


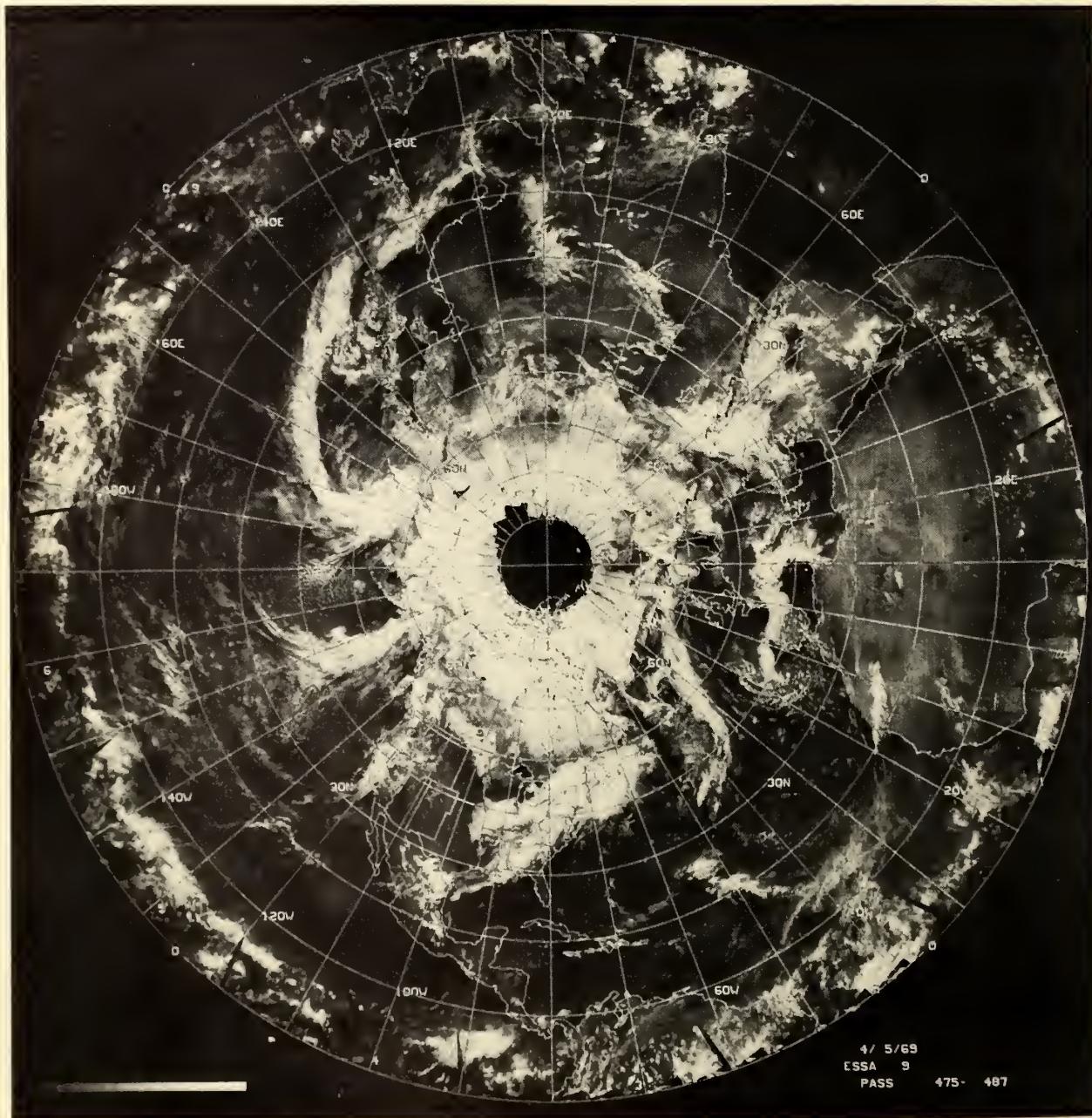


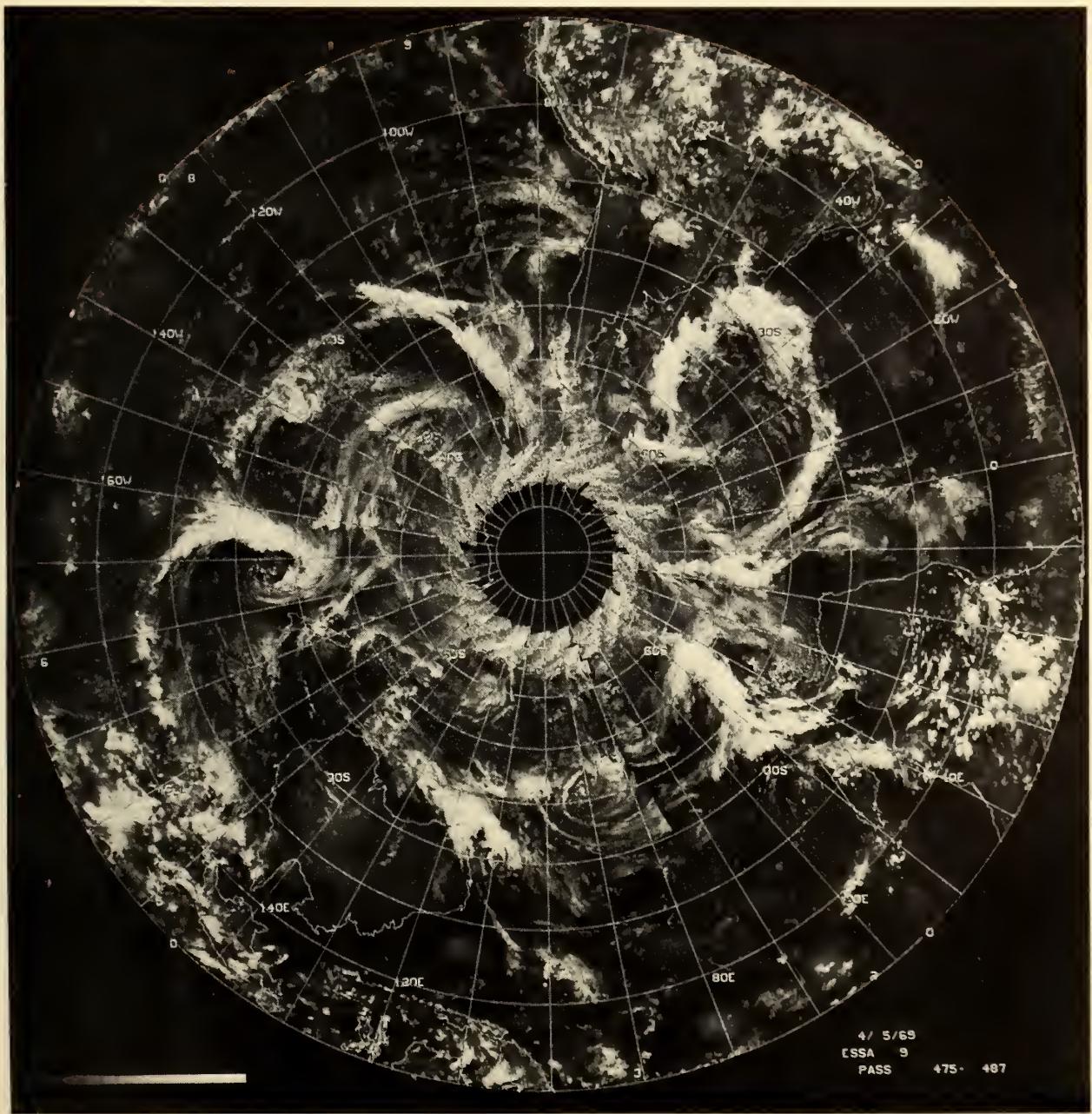


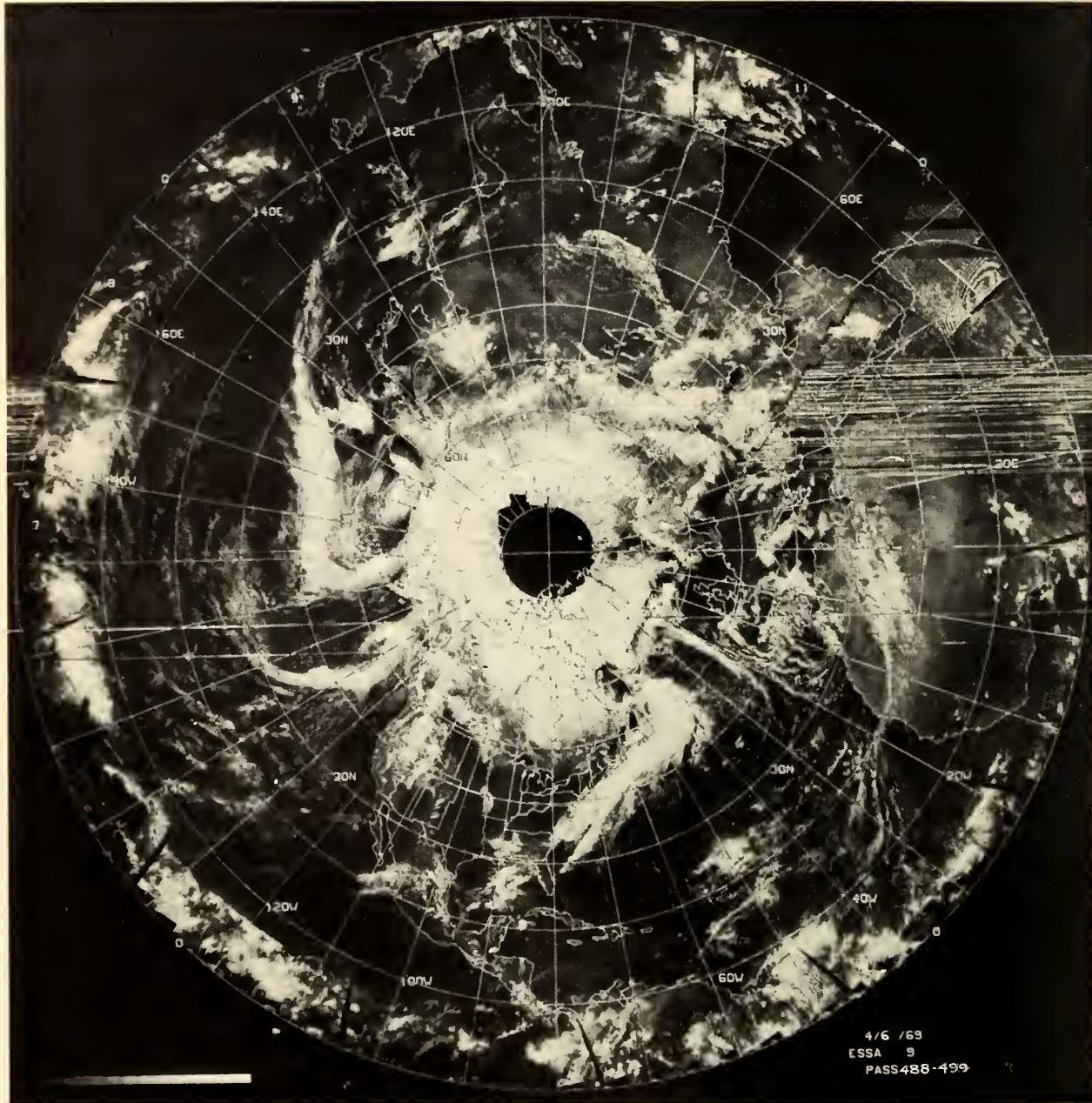


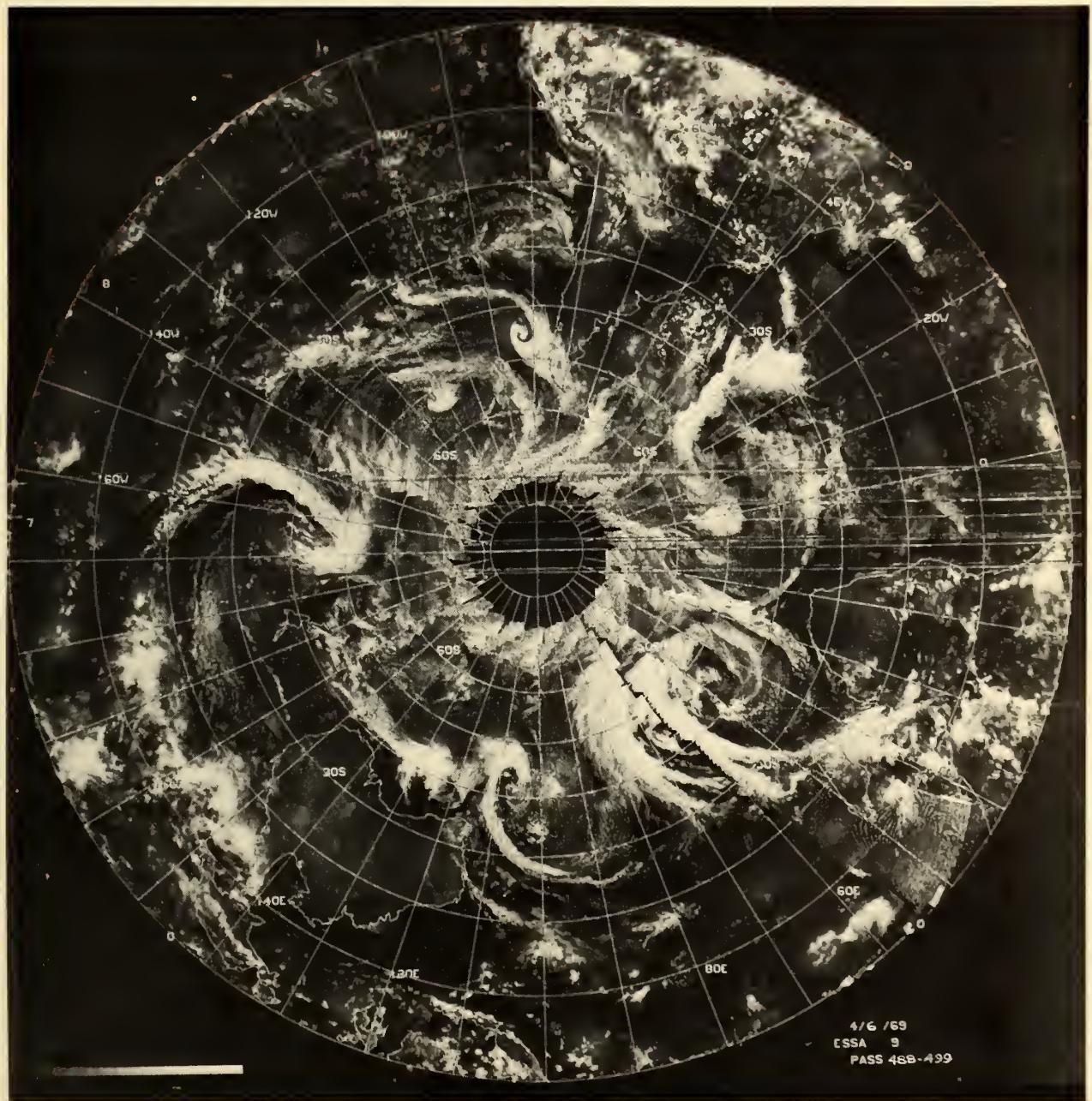


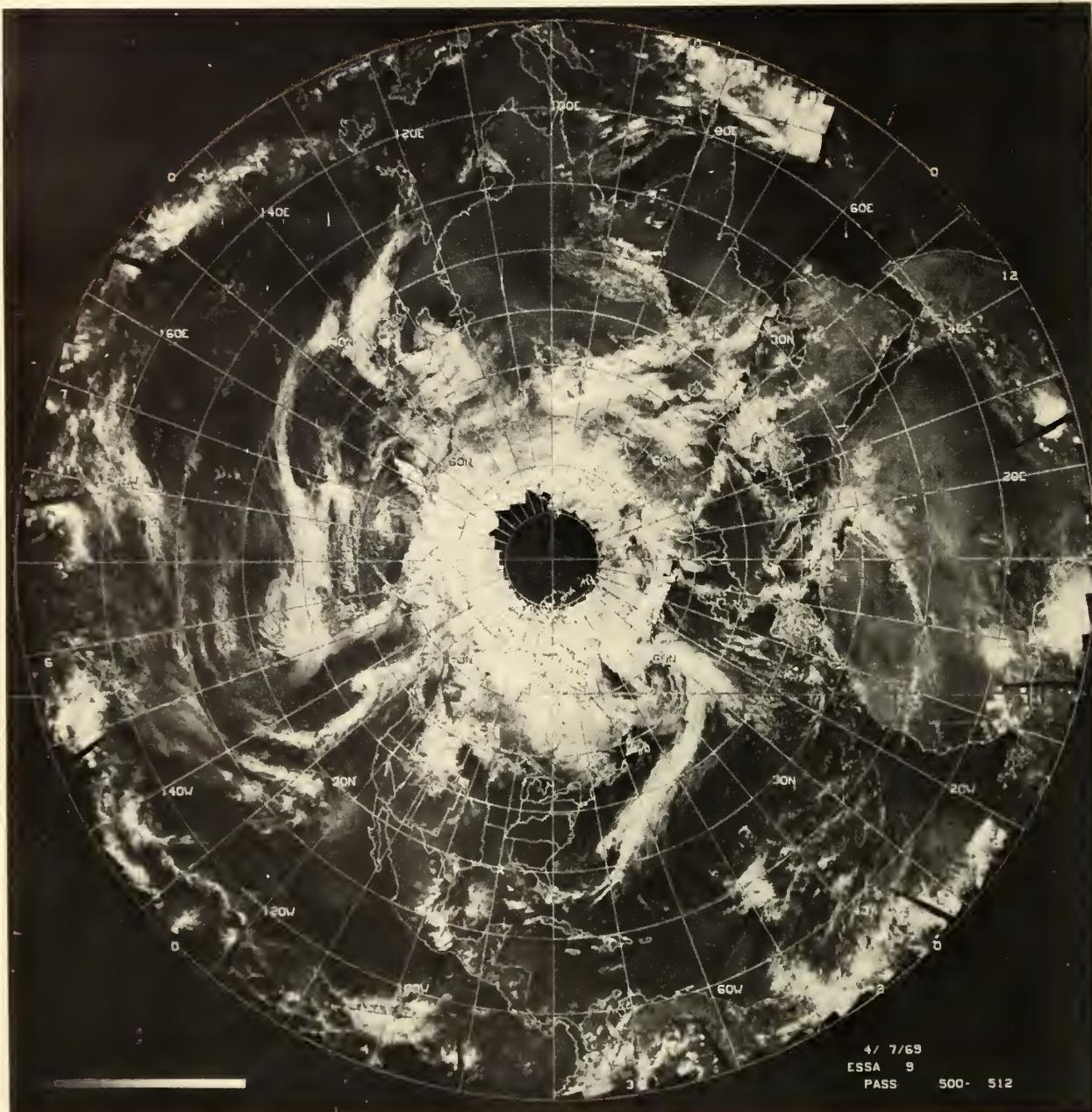


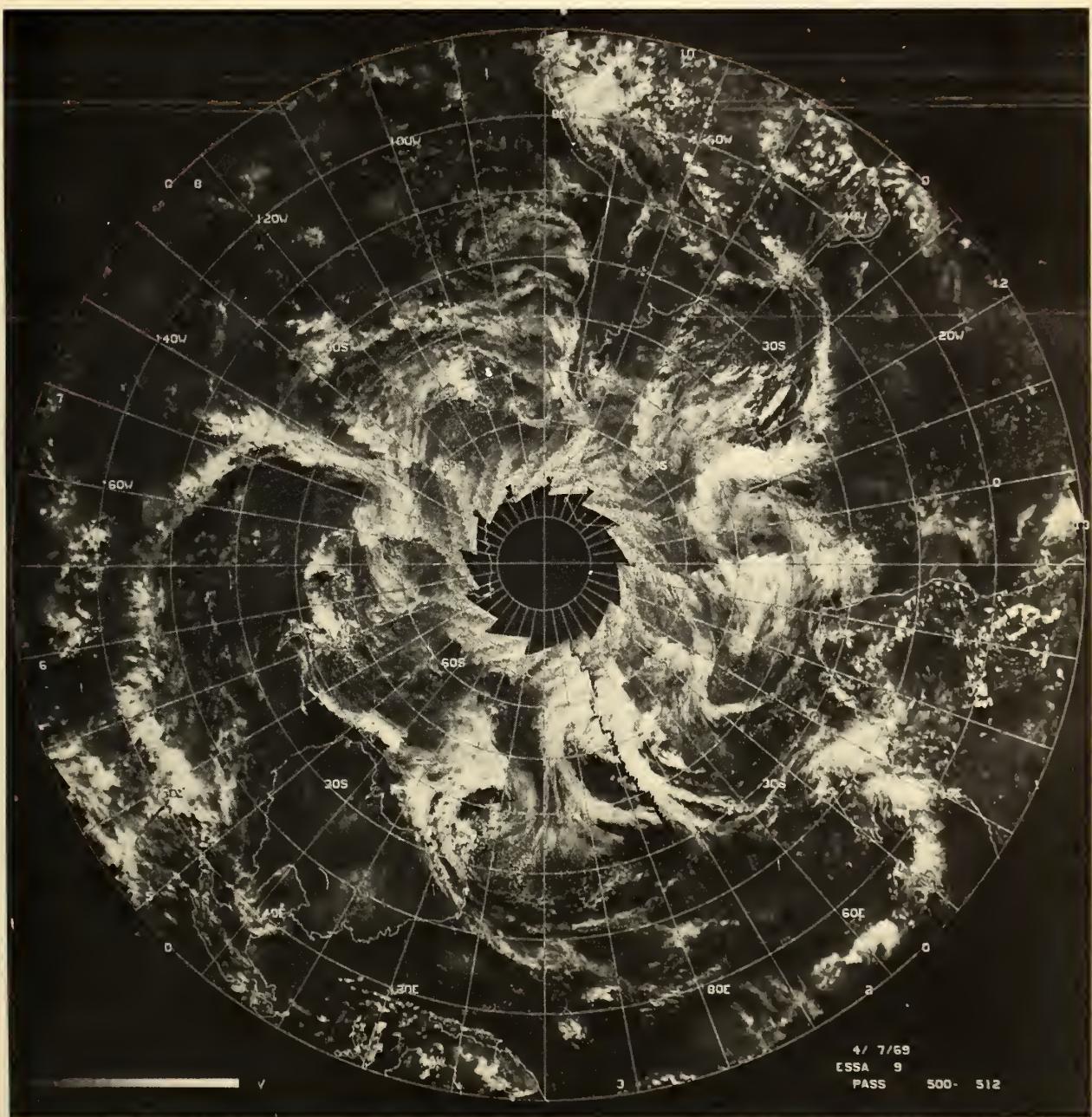


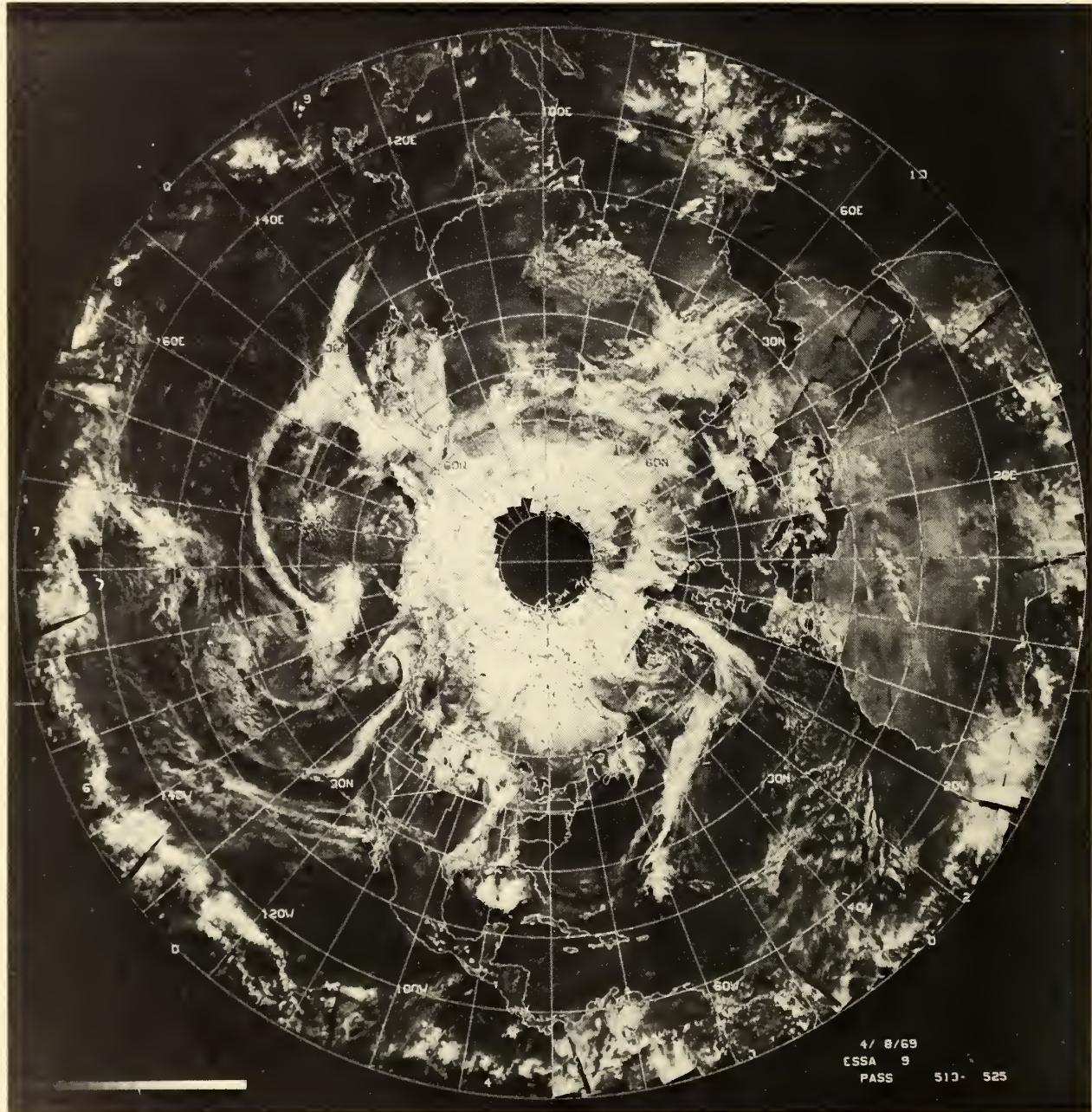


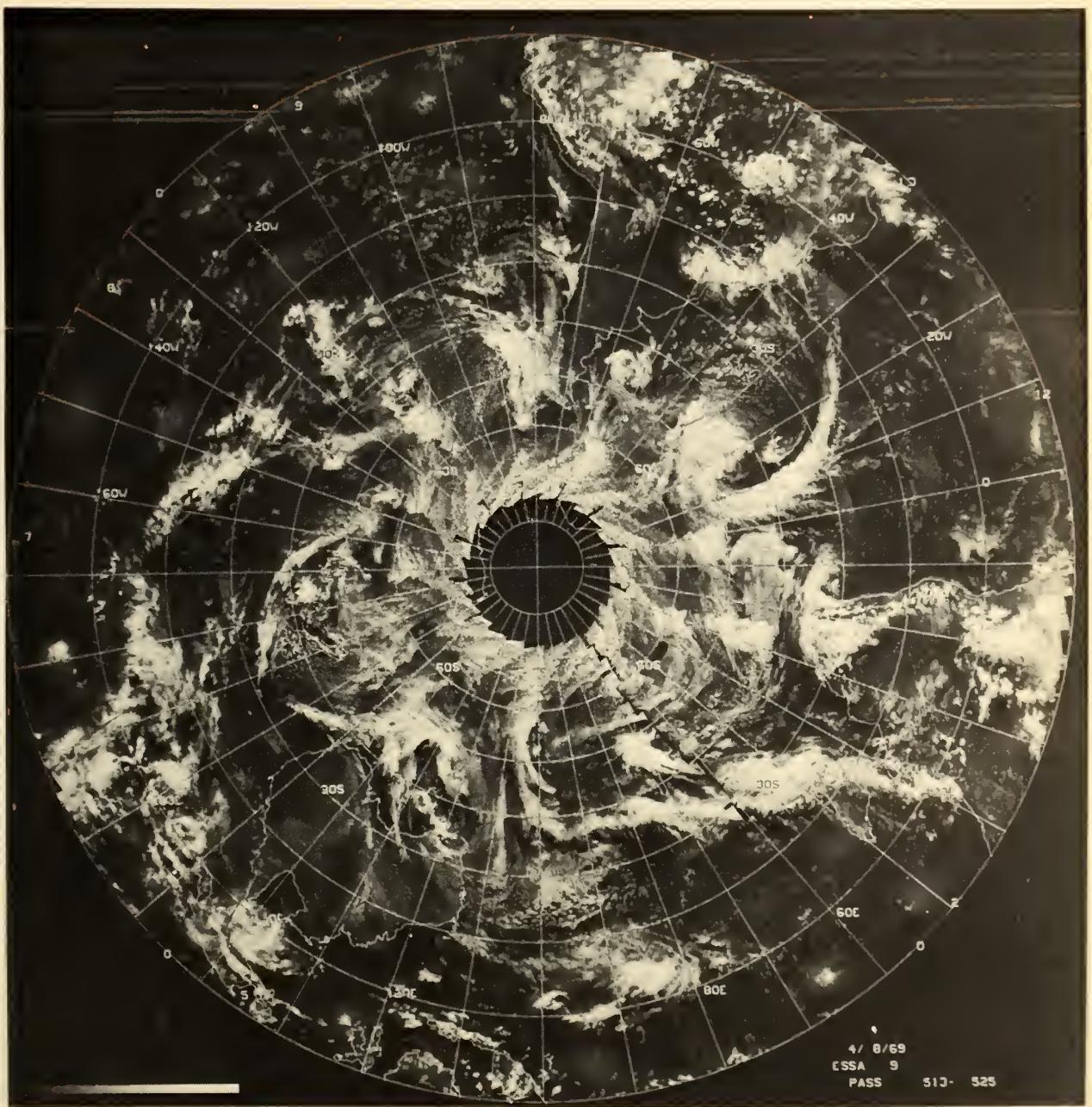


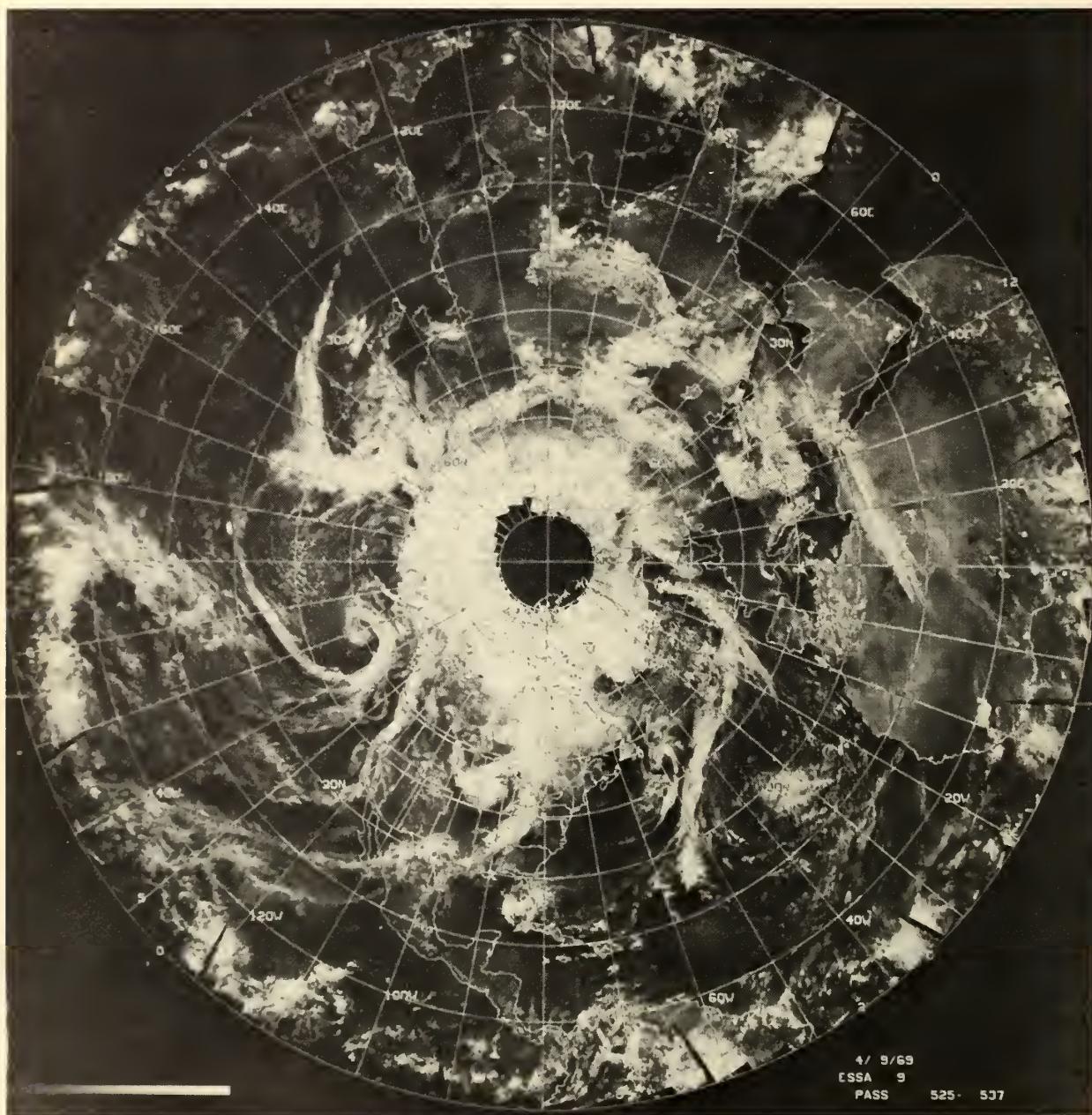


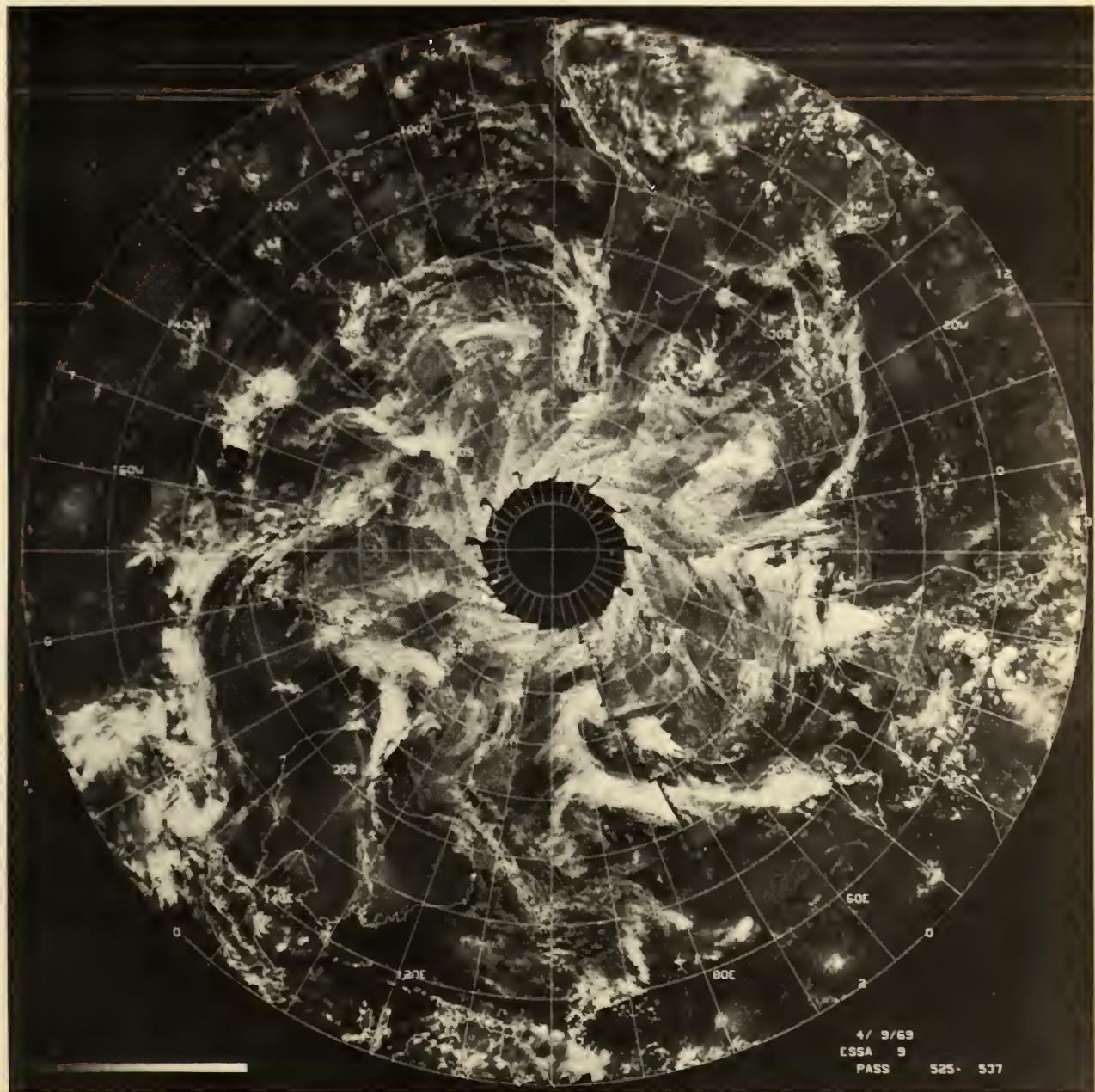


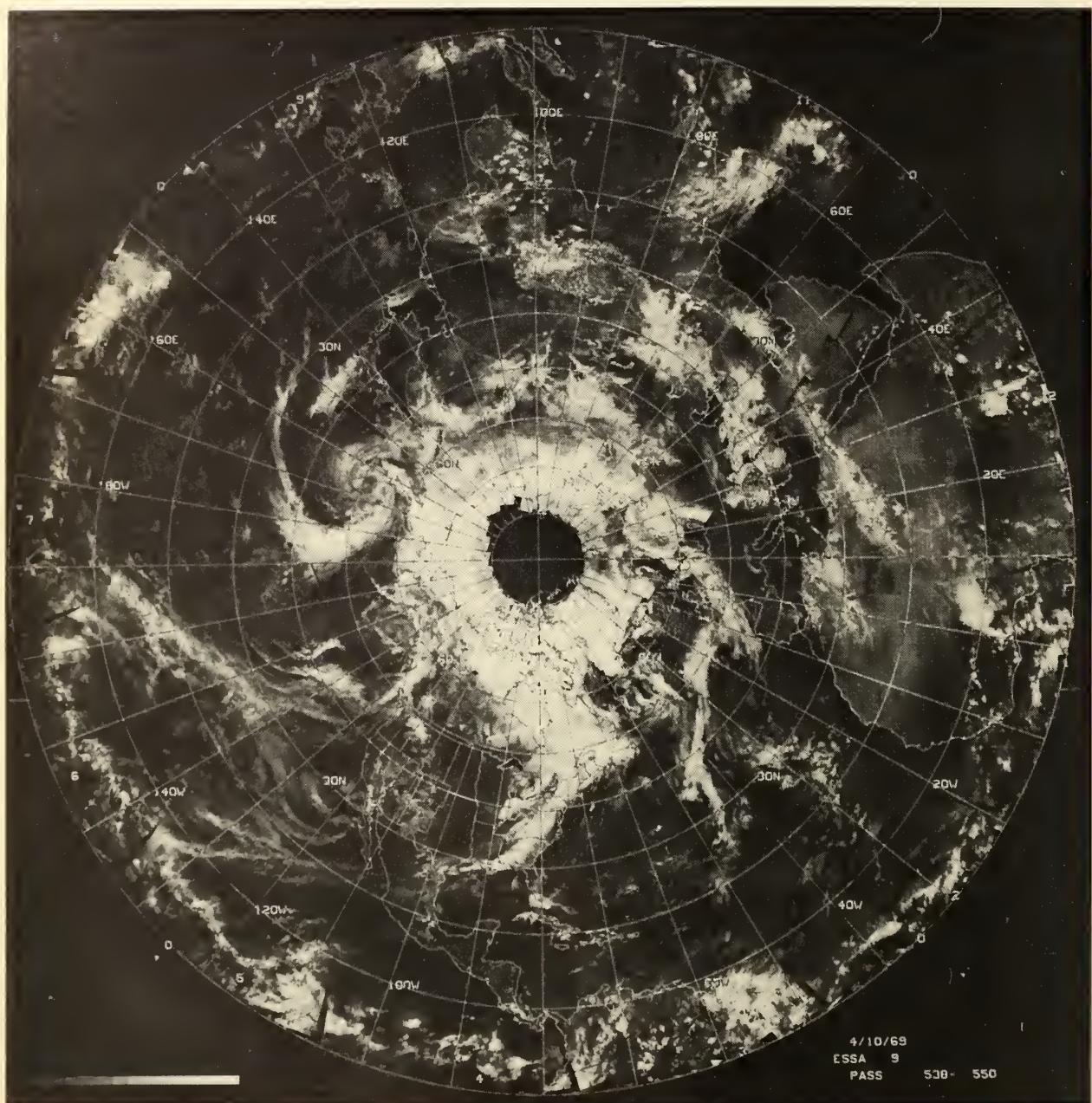


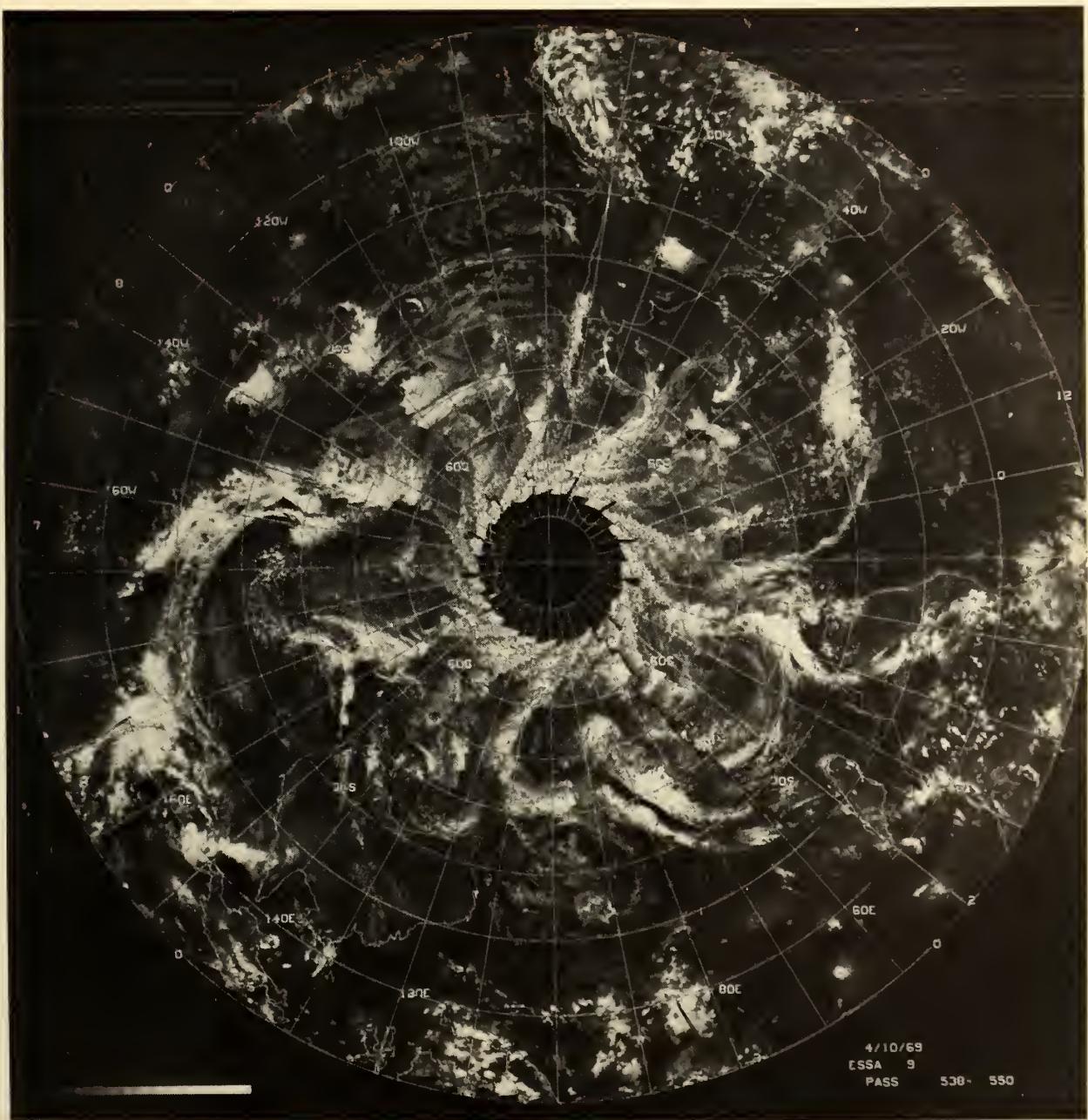


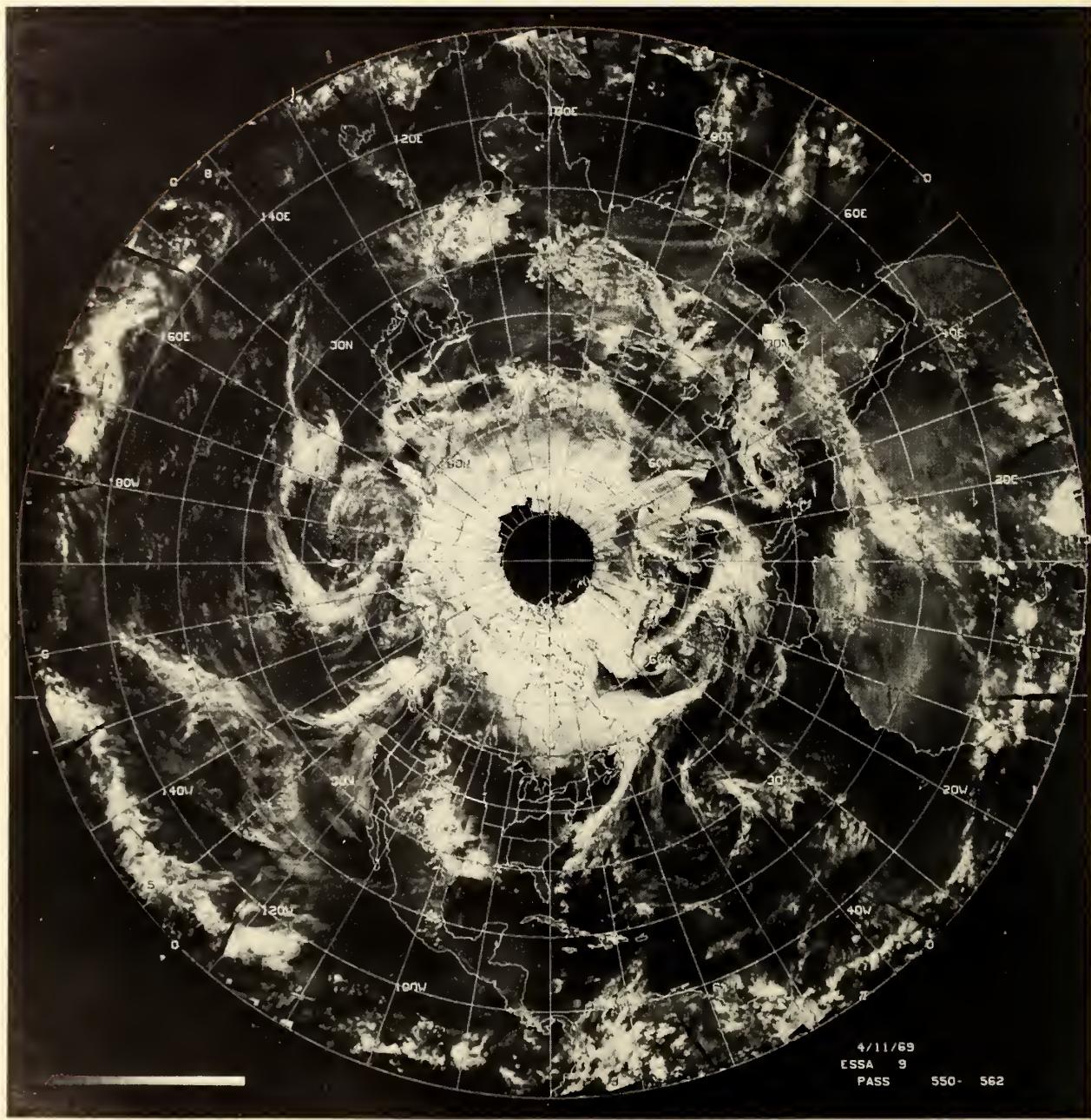


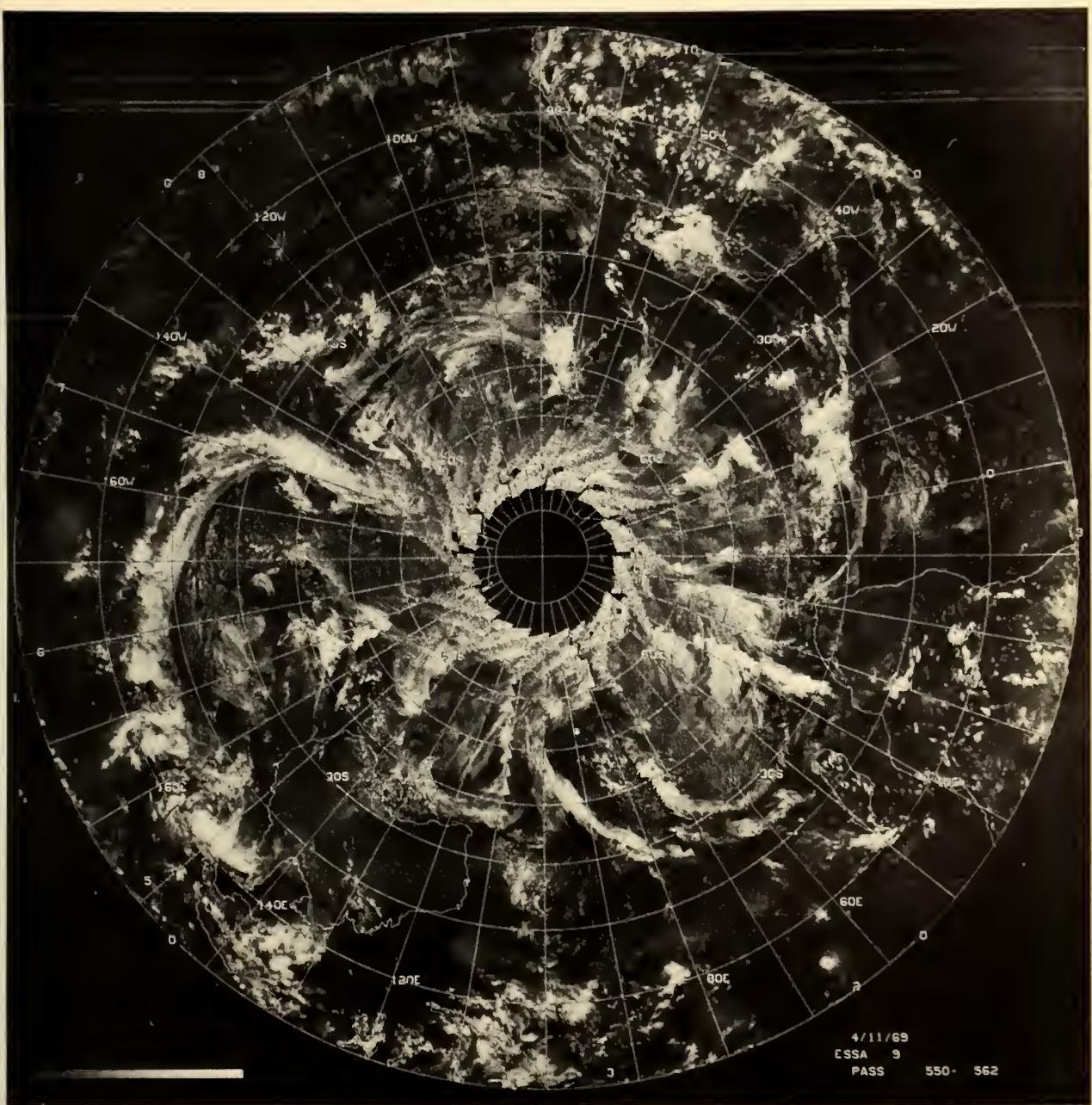


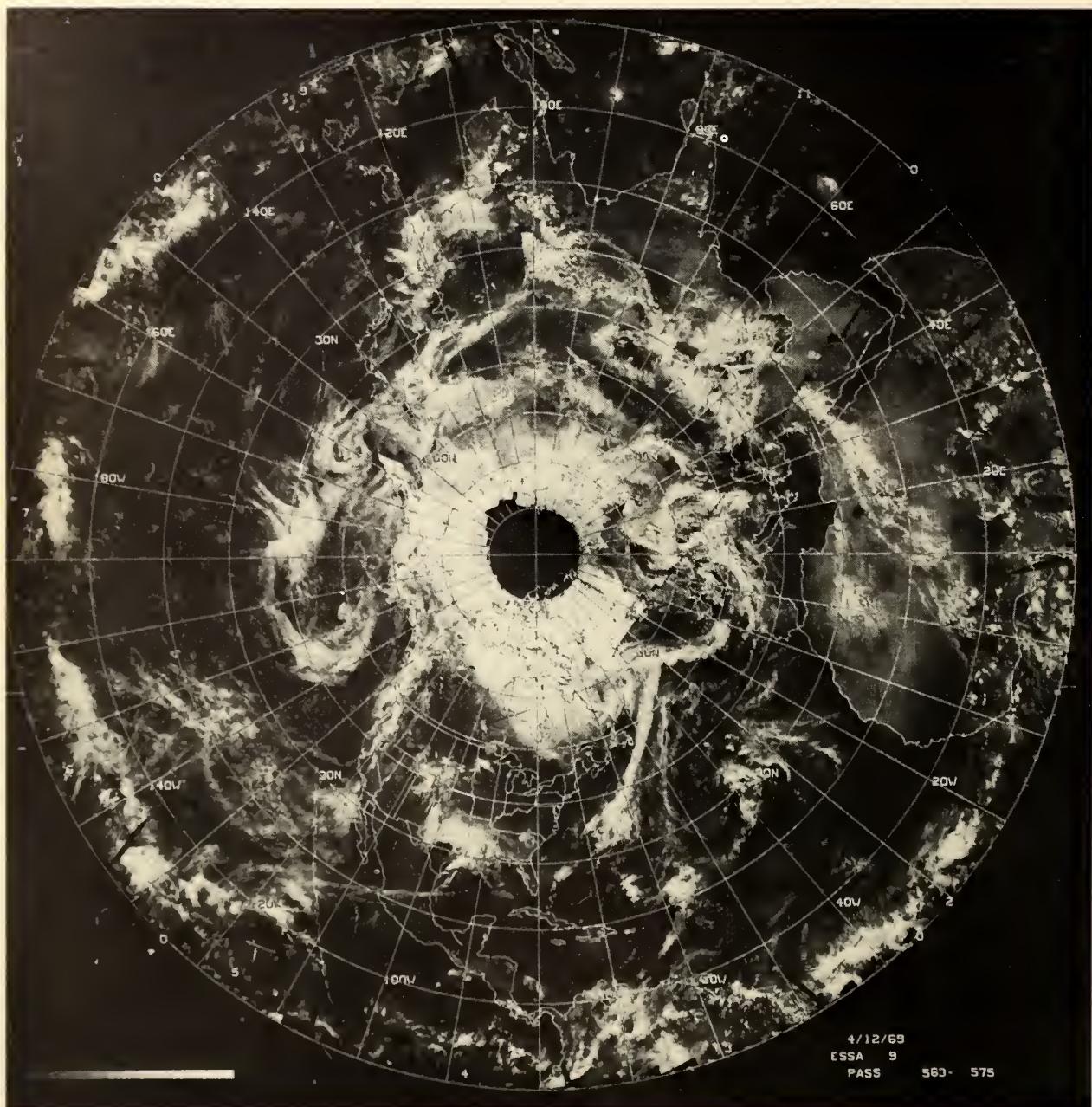




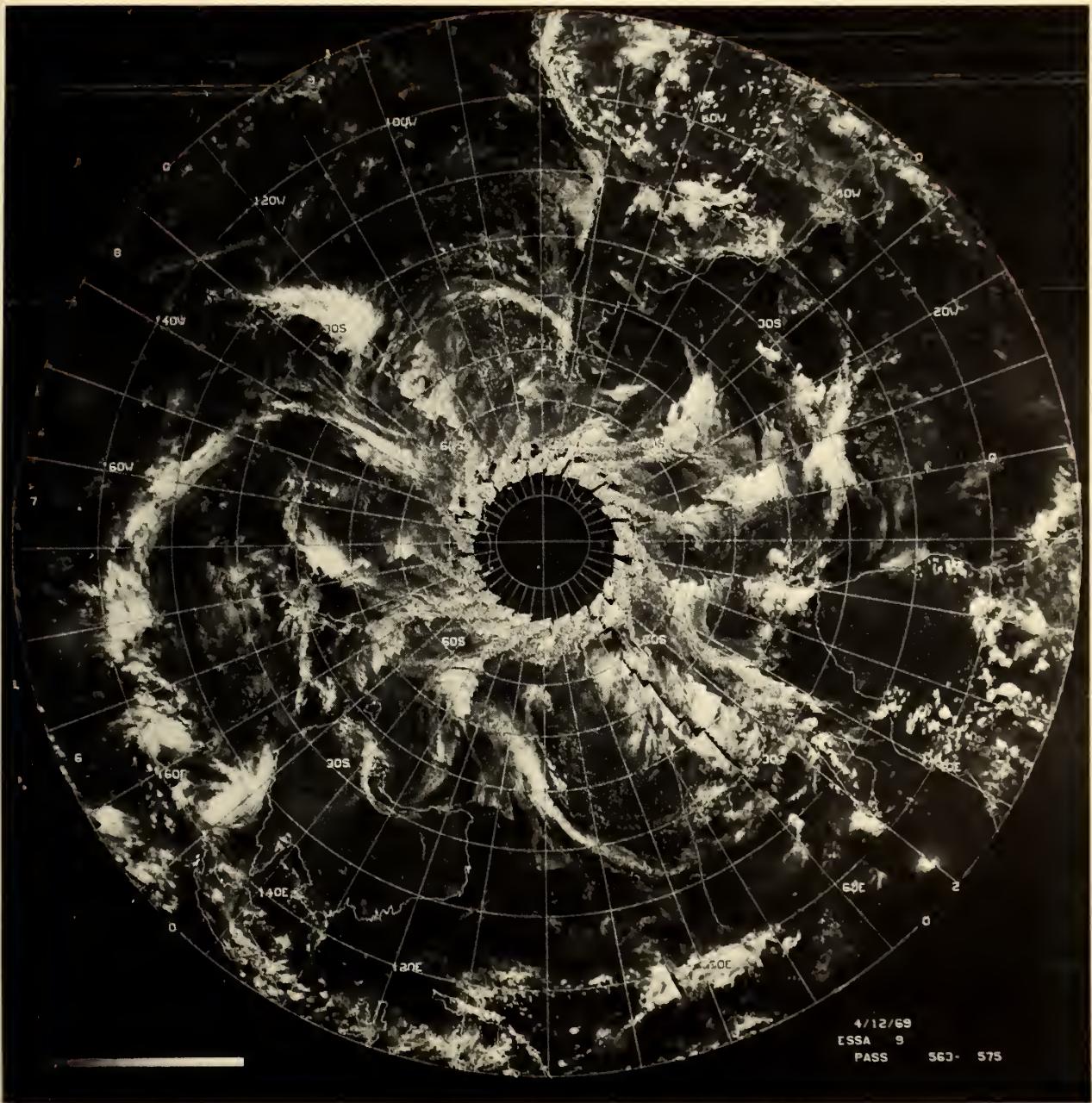


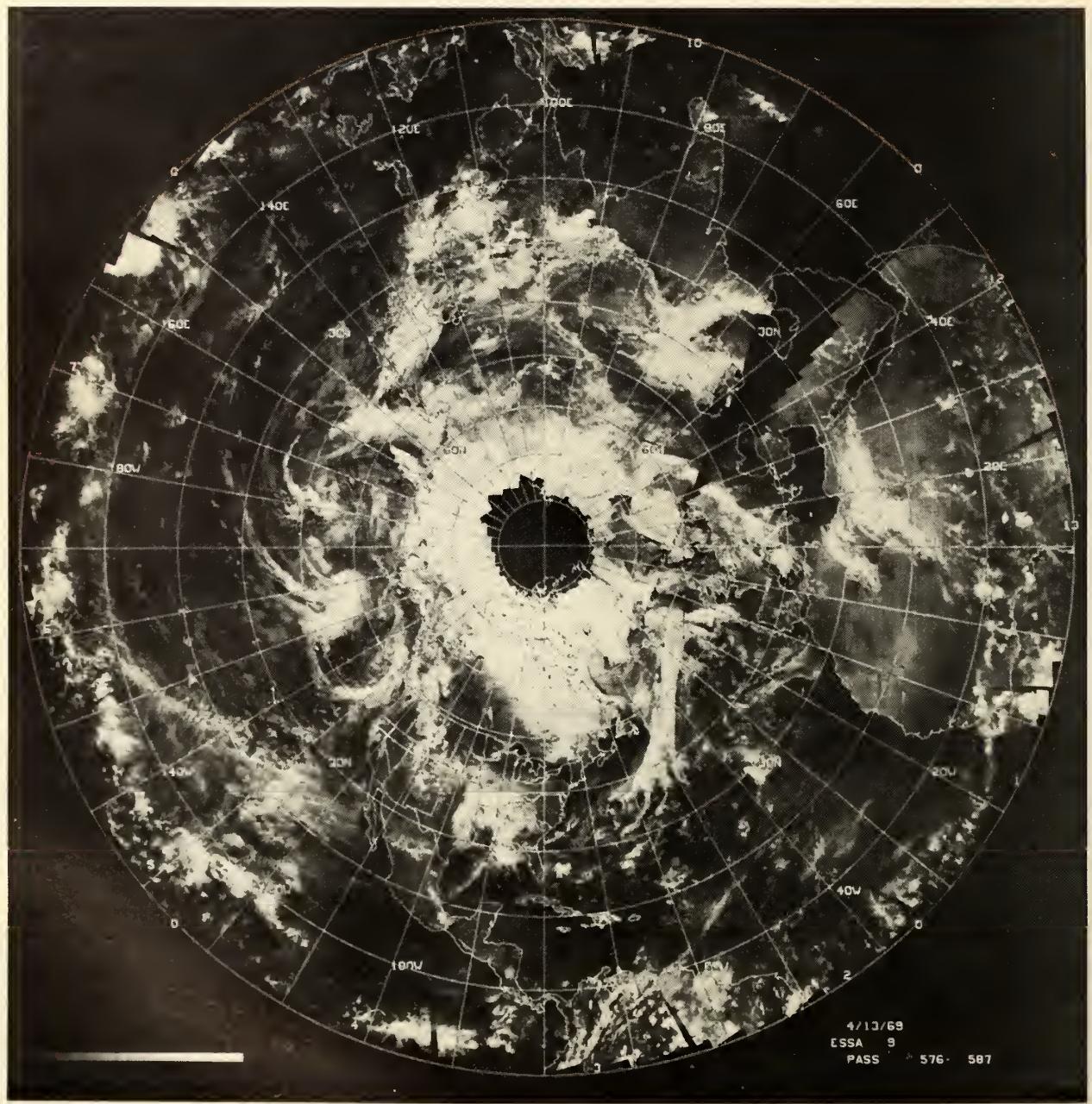


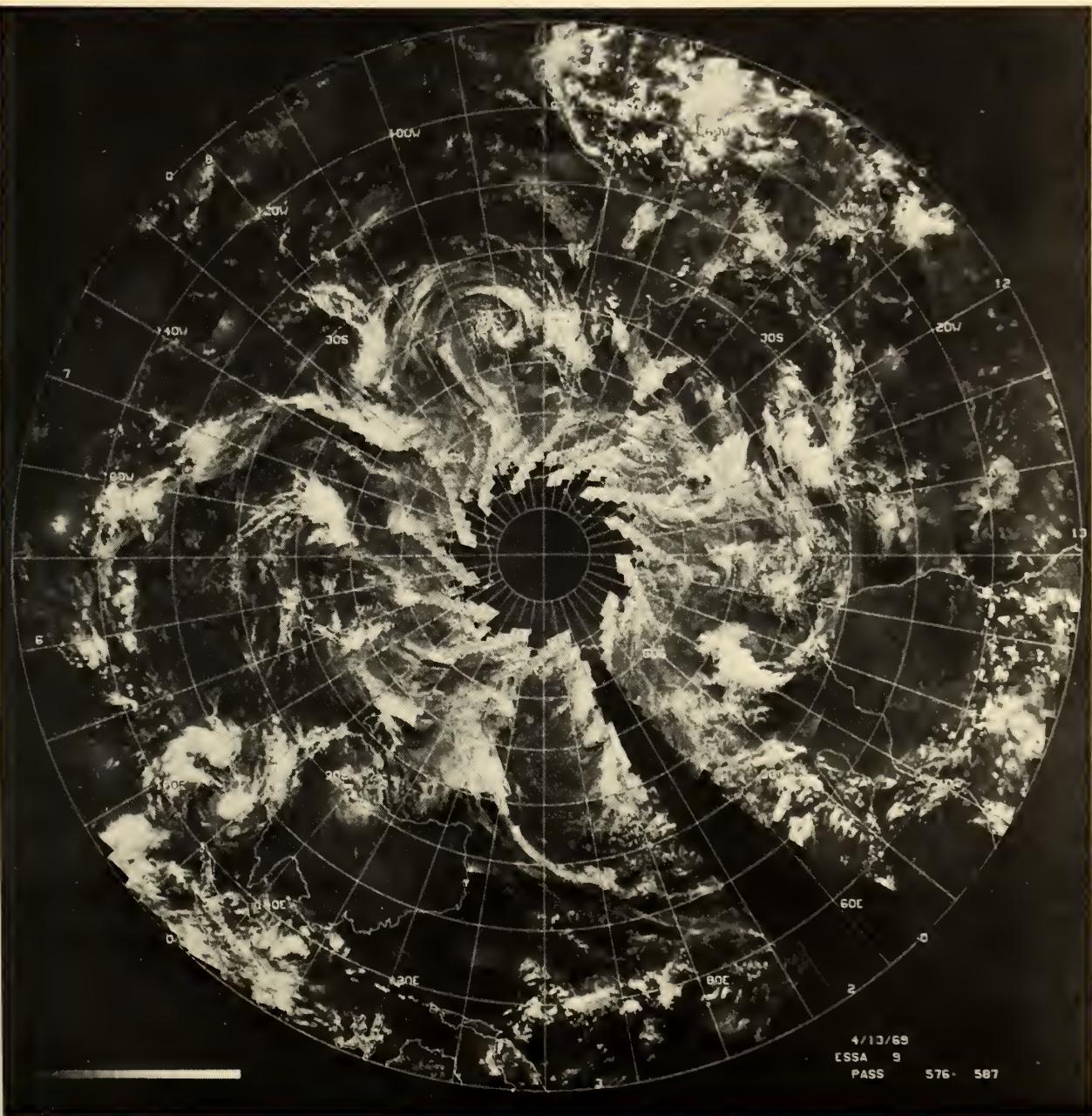


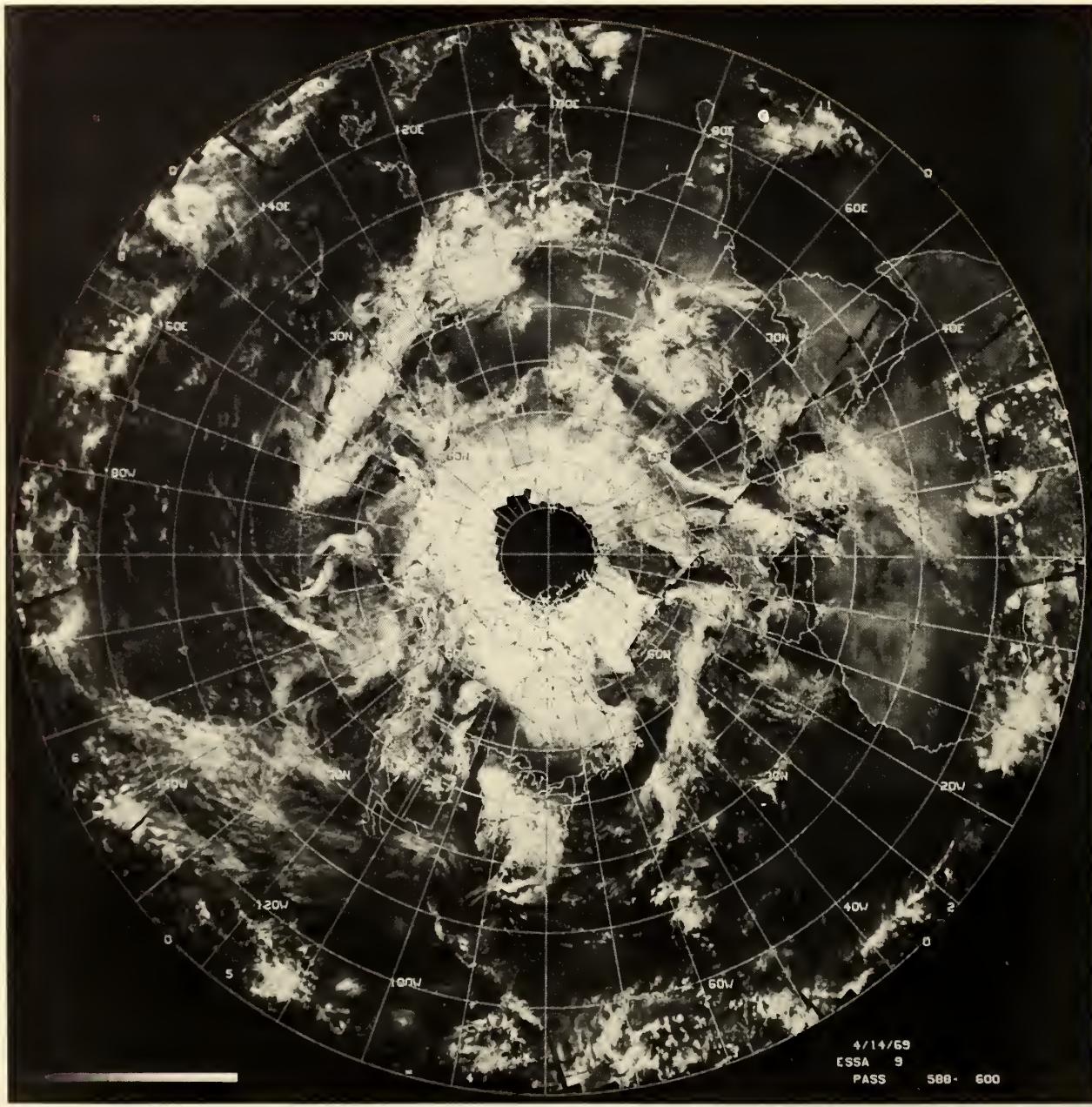


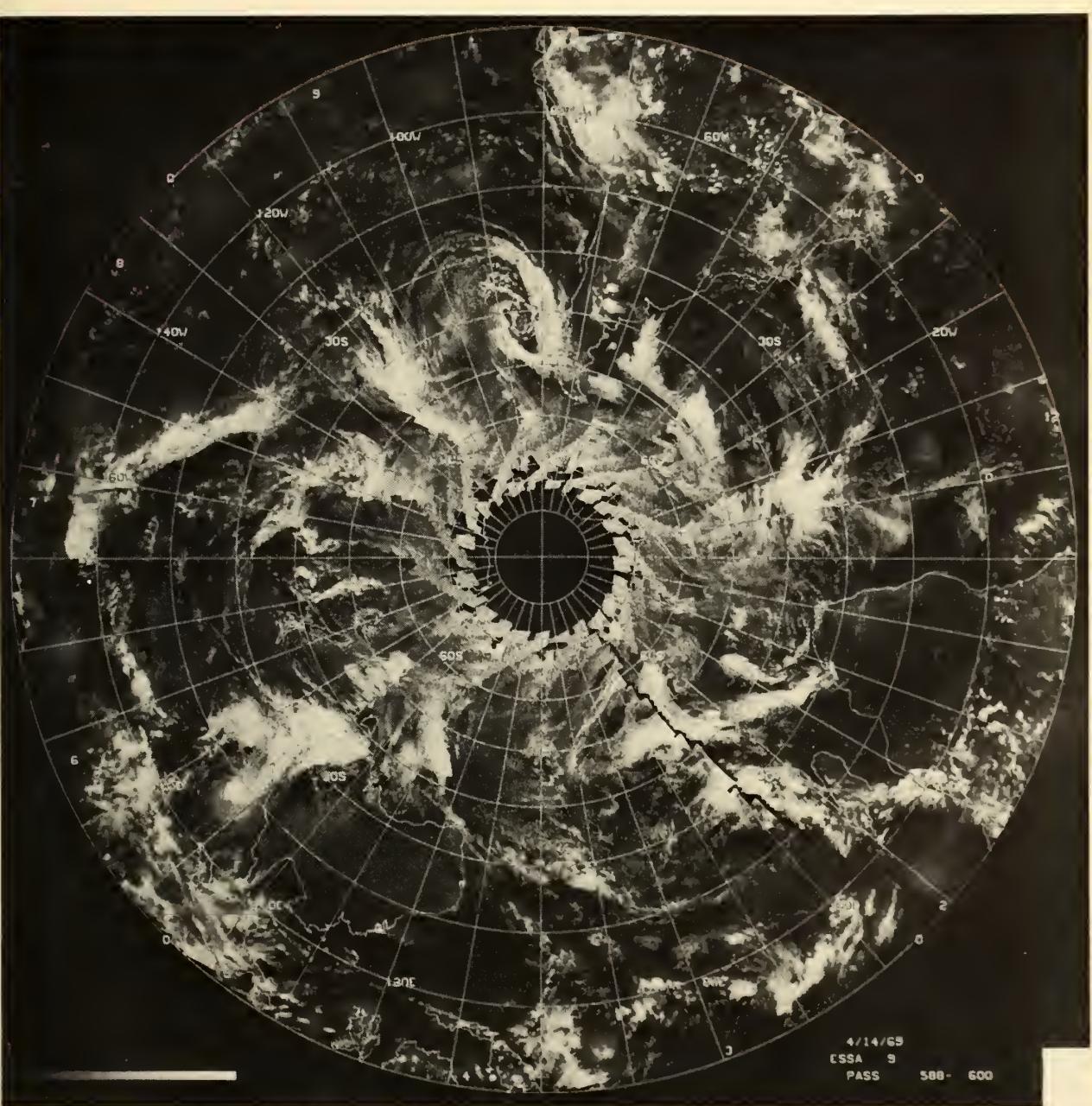
4/12/69
ESSA 9
PASS 563- 575

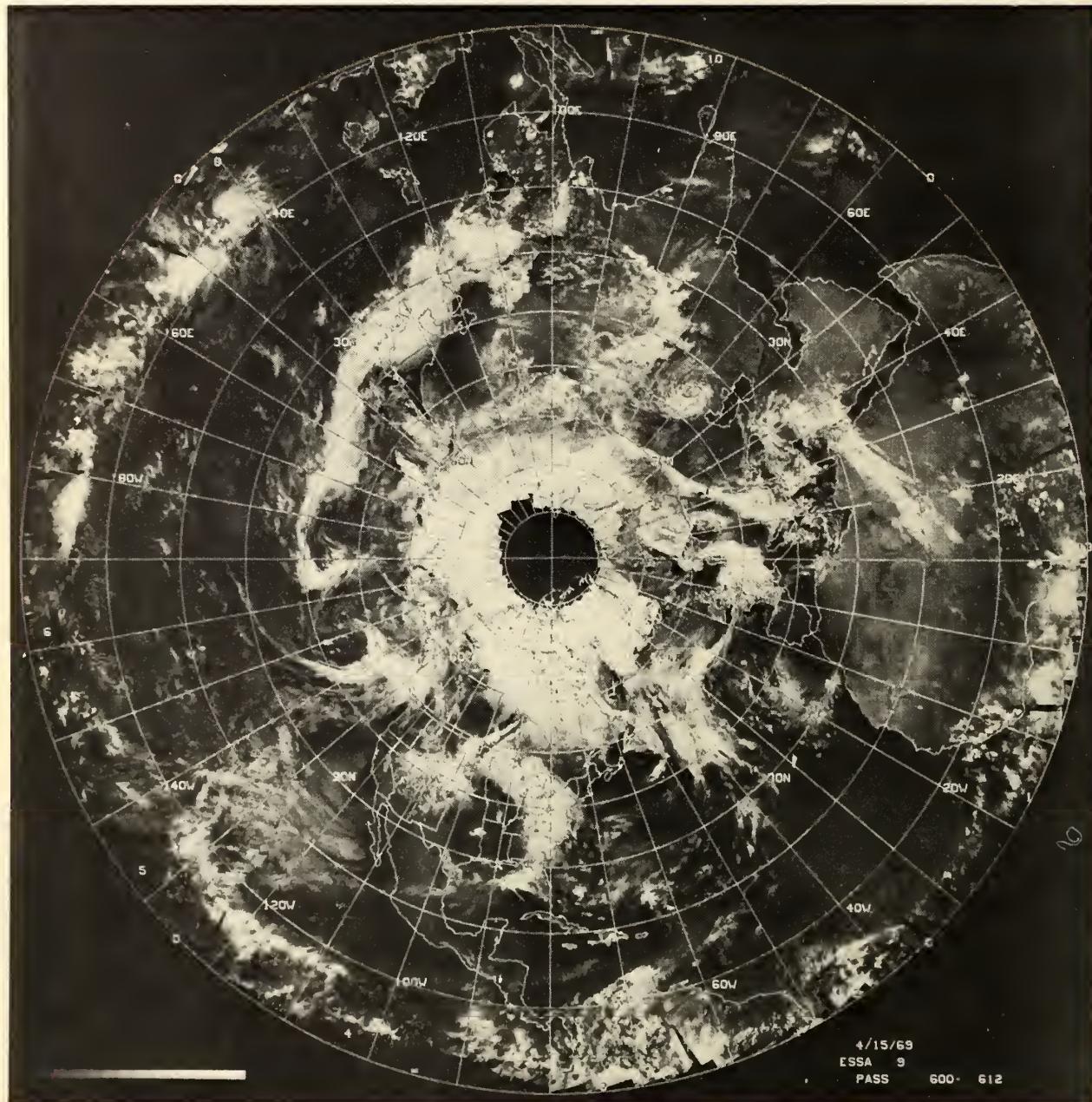


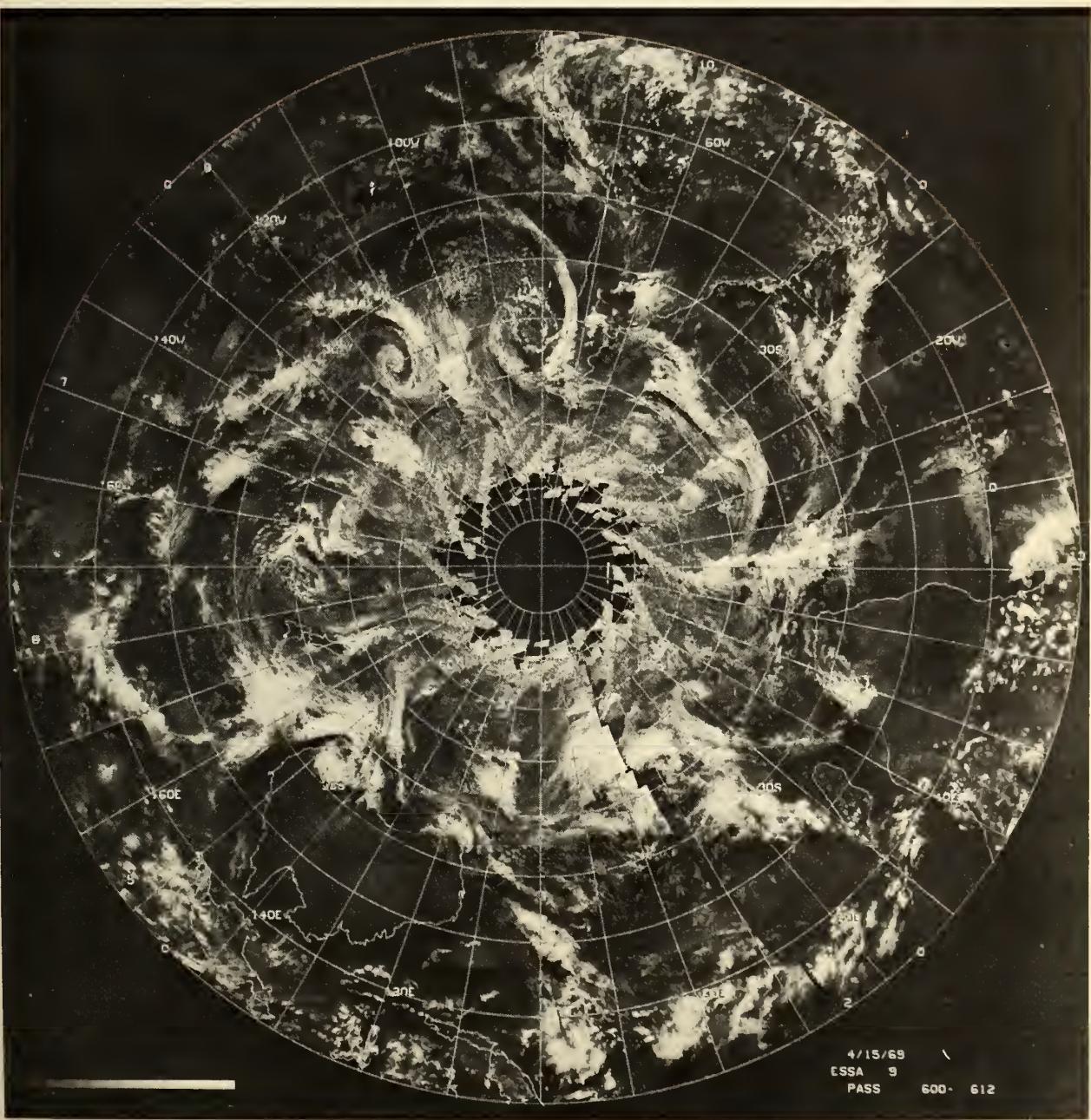


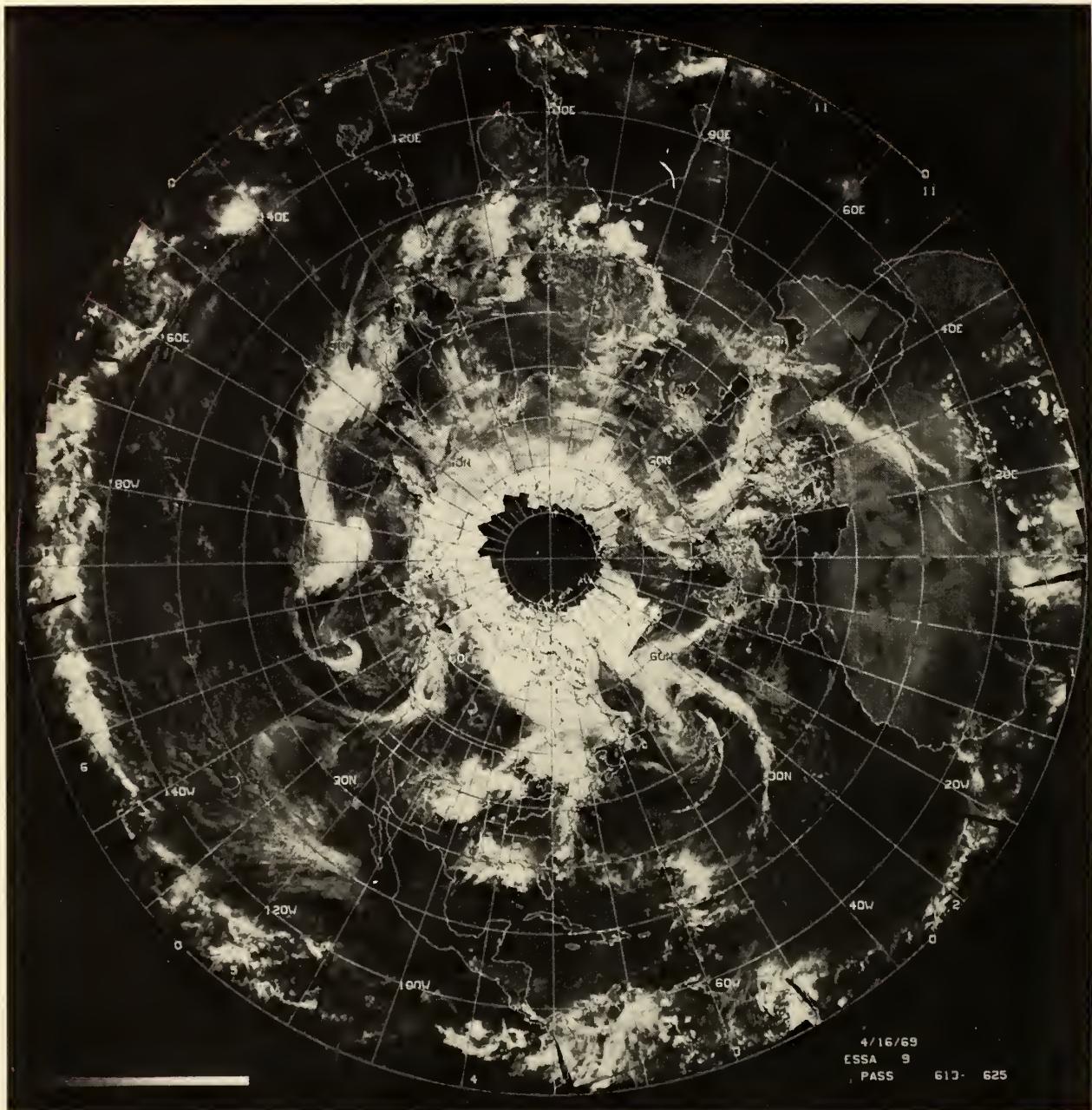


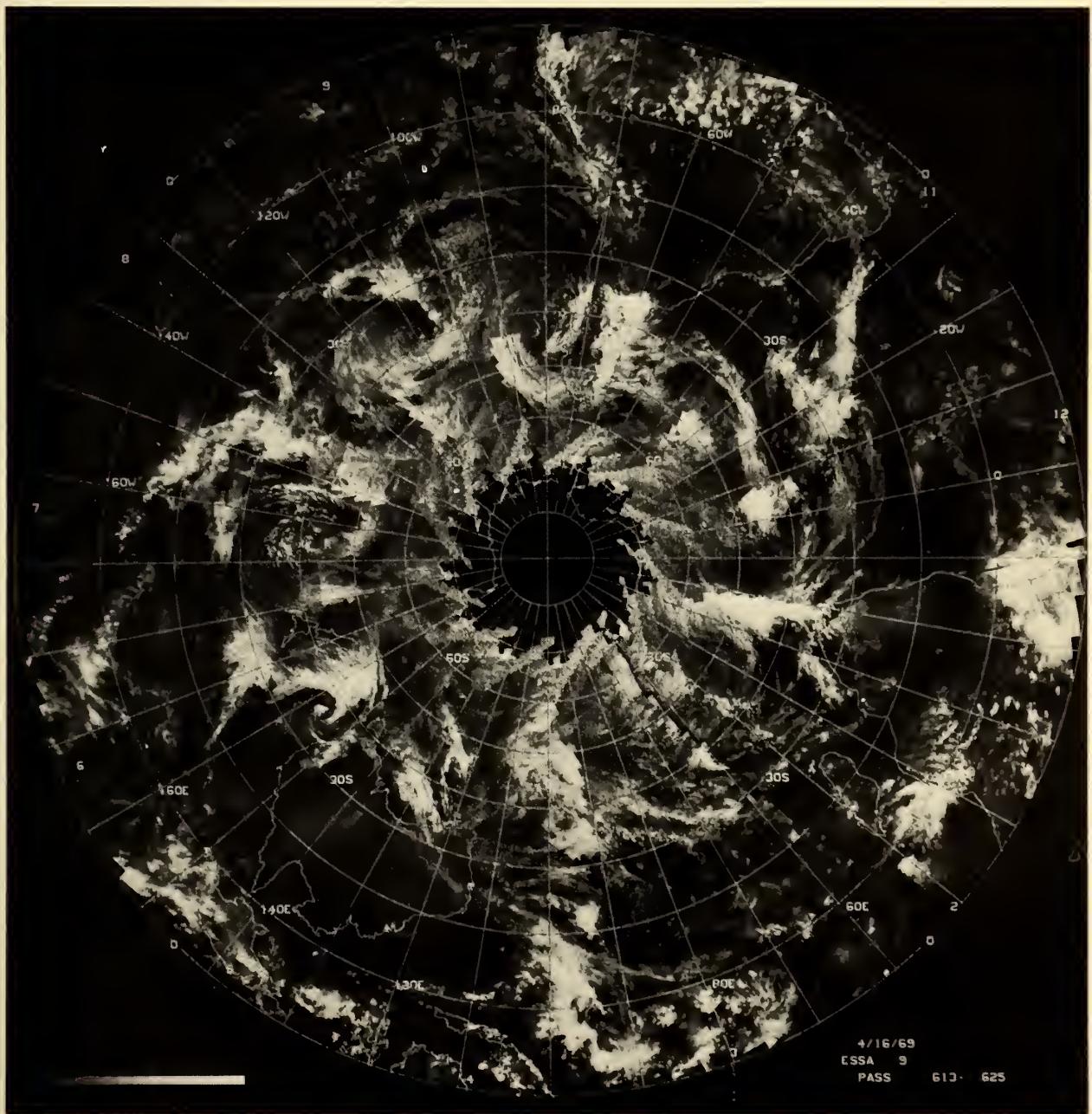


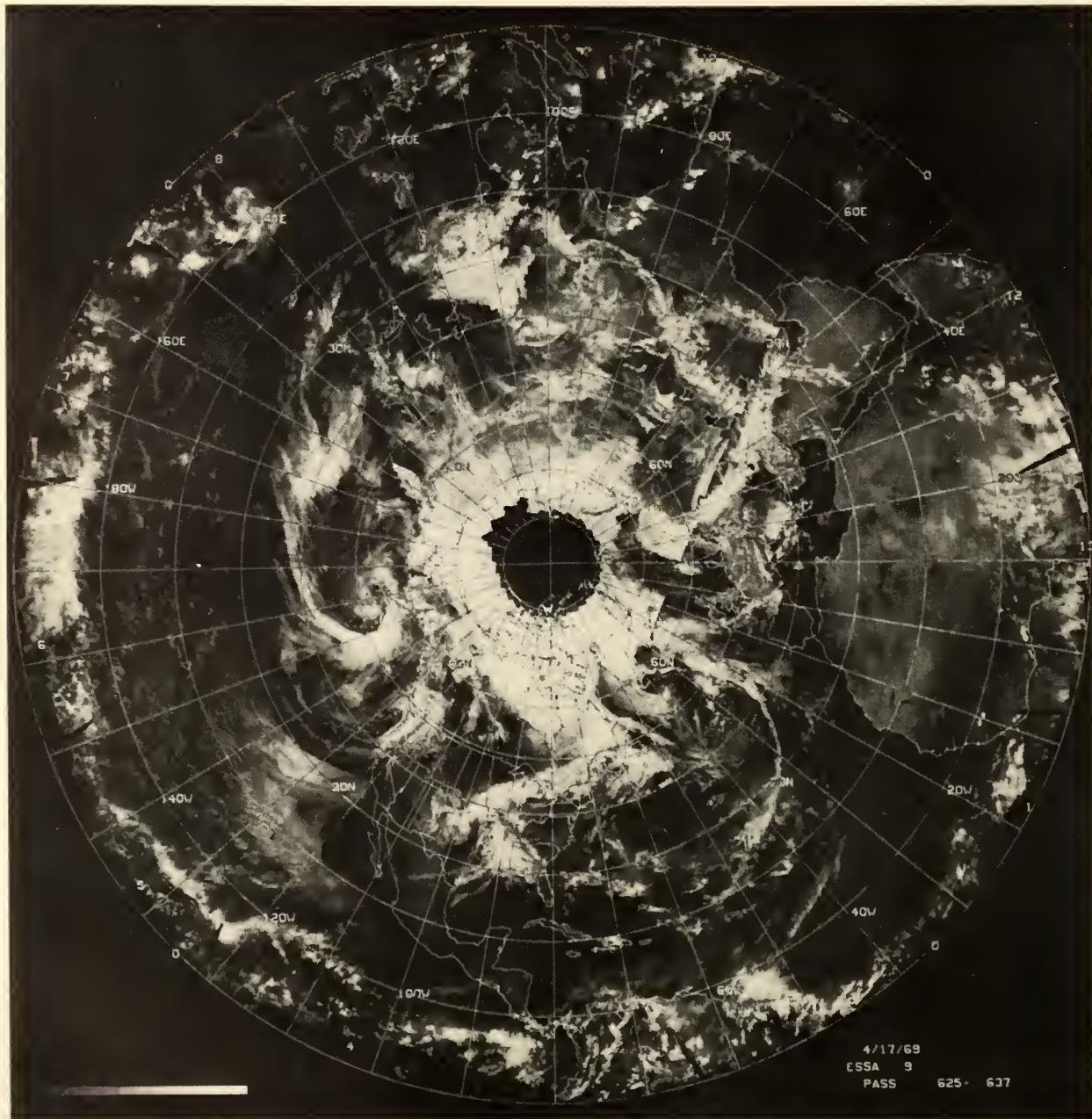


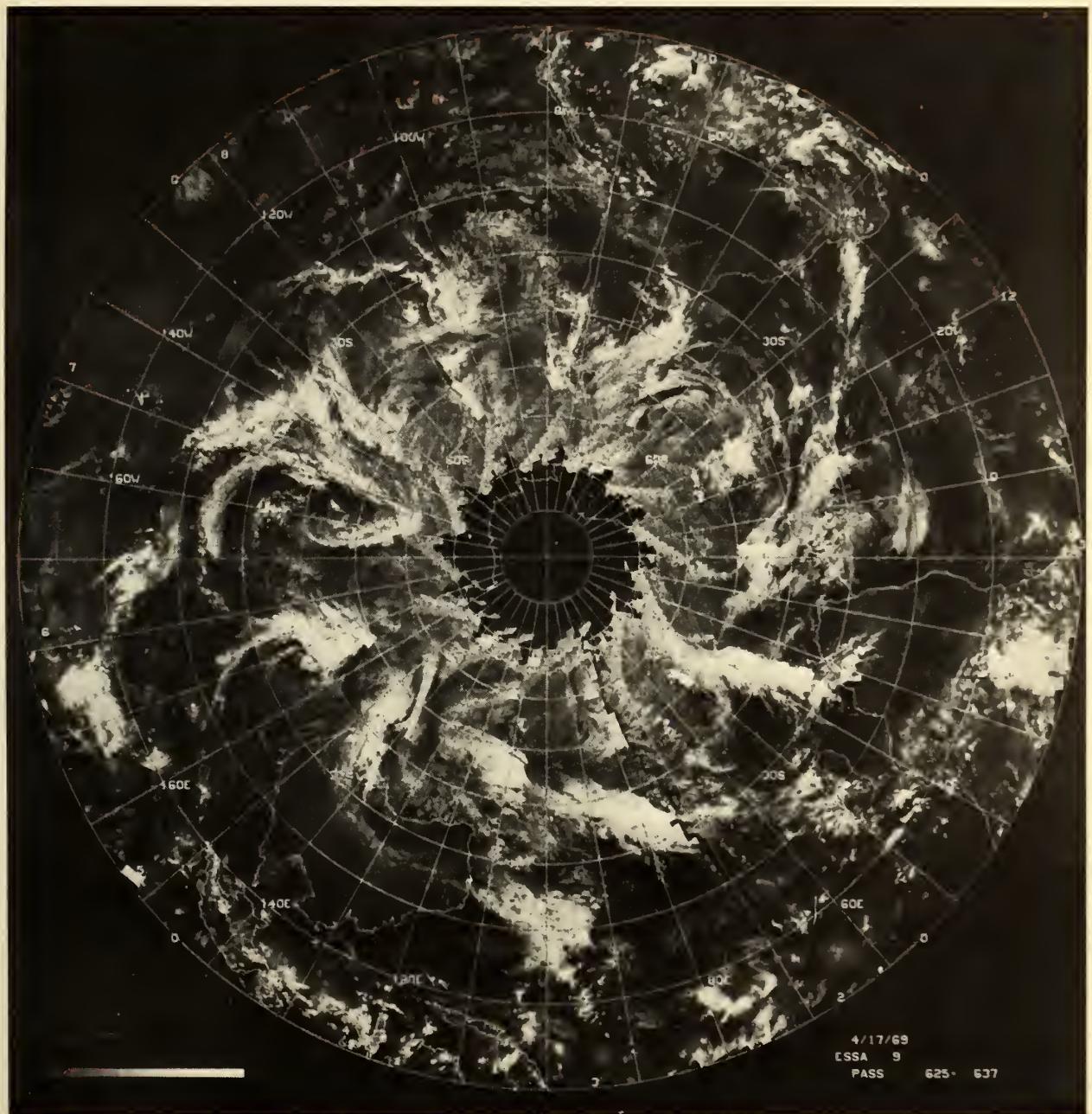


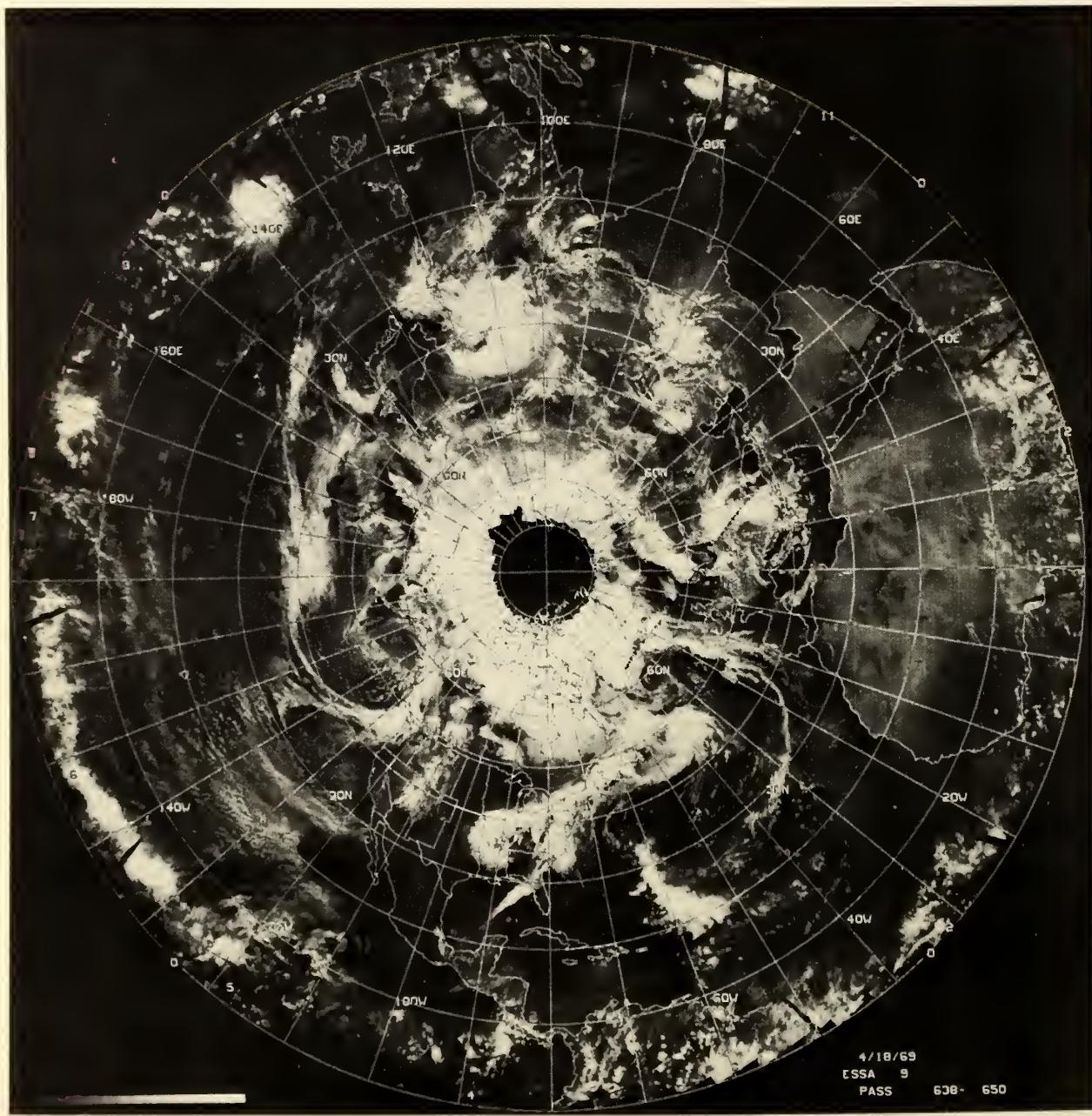


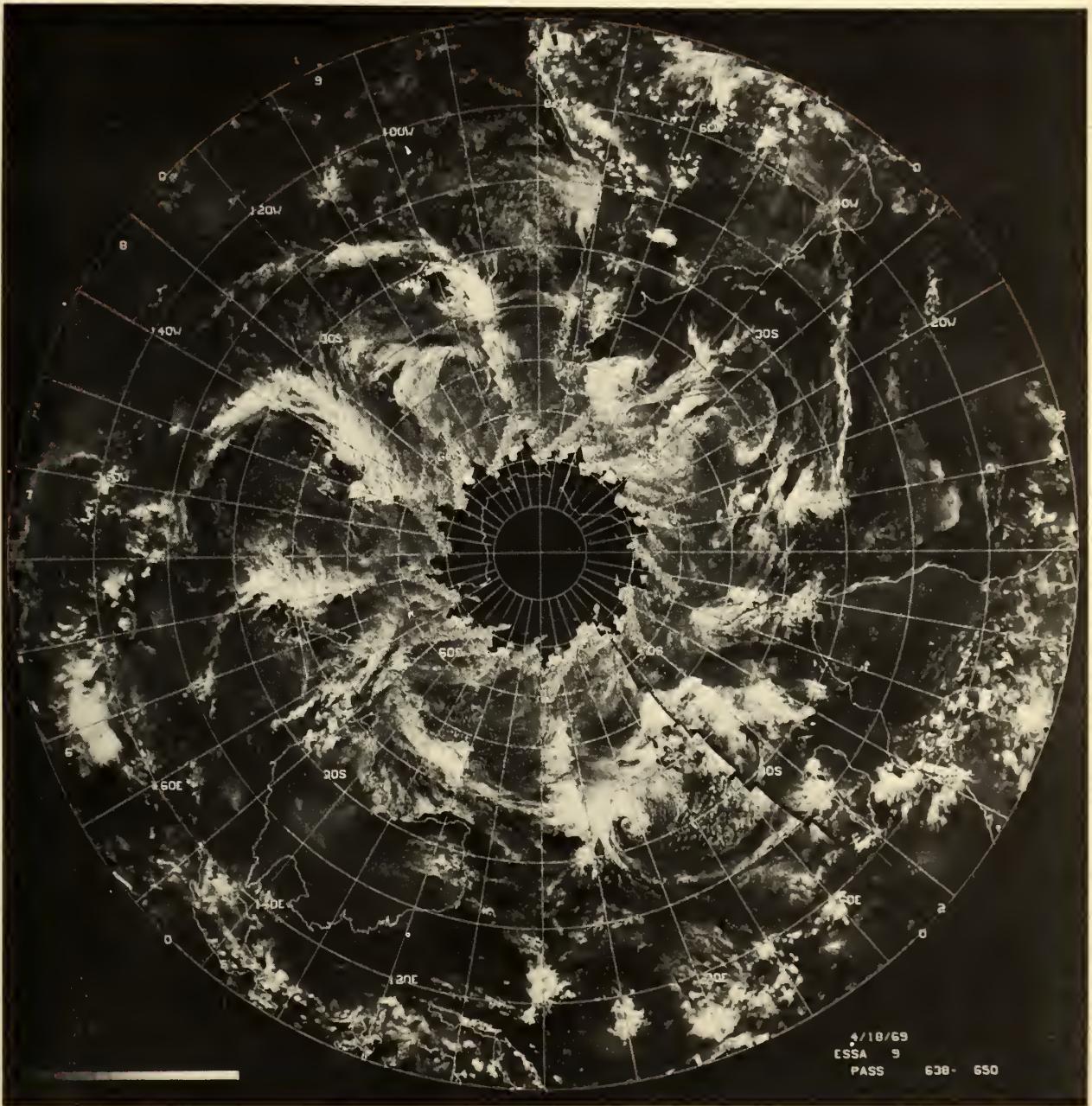


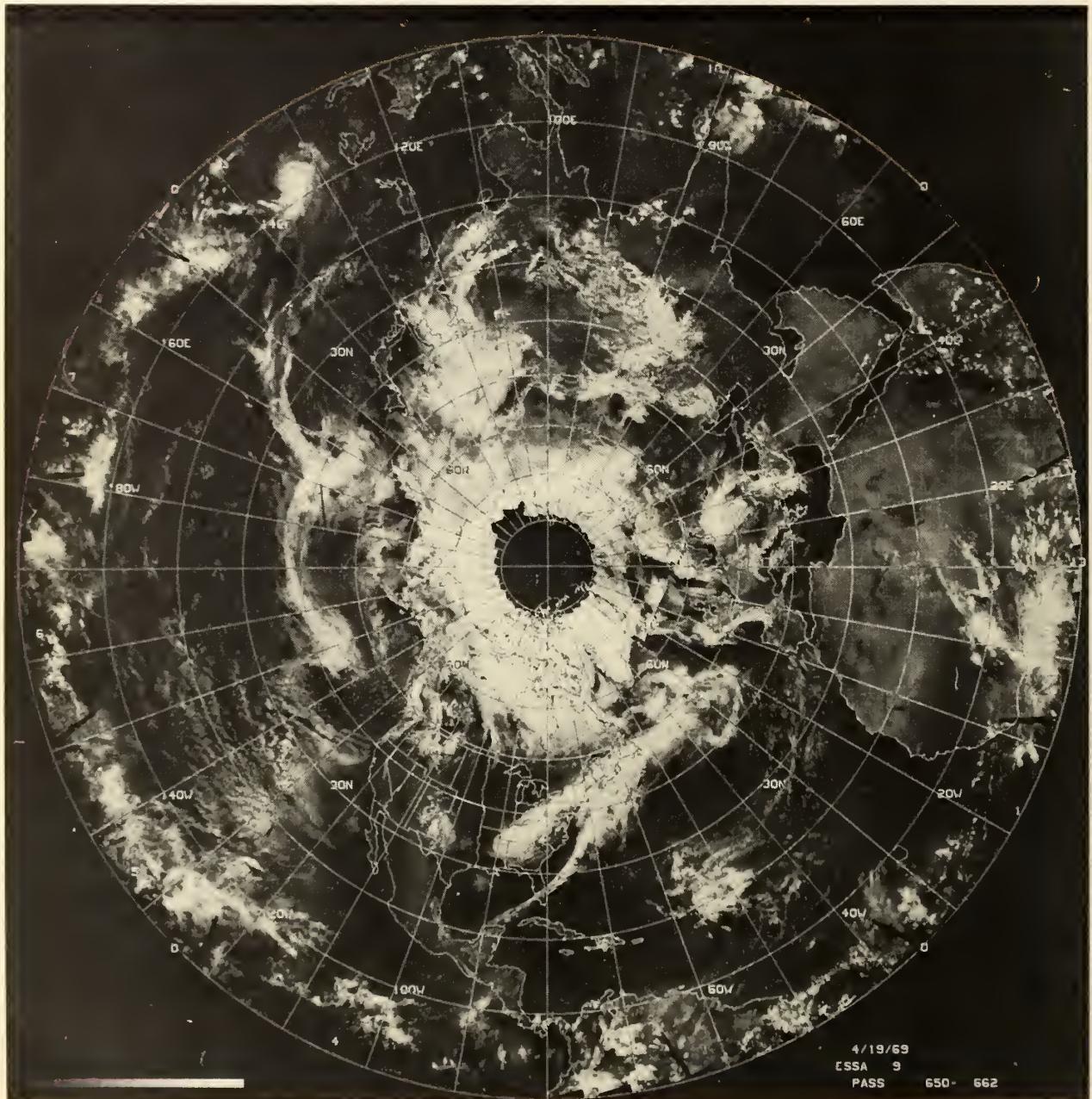


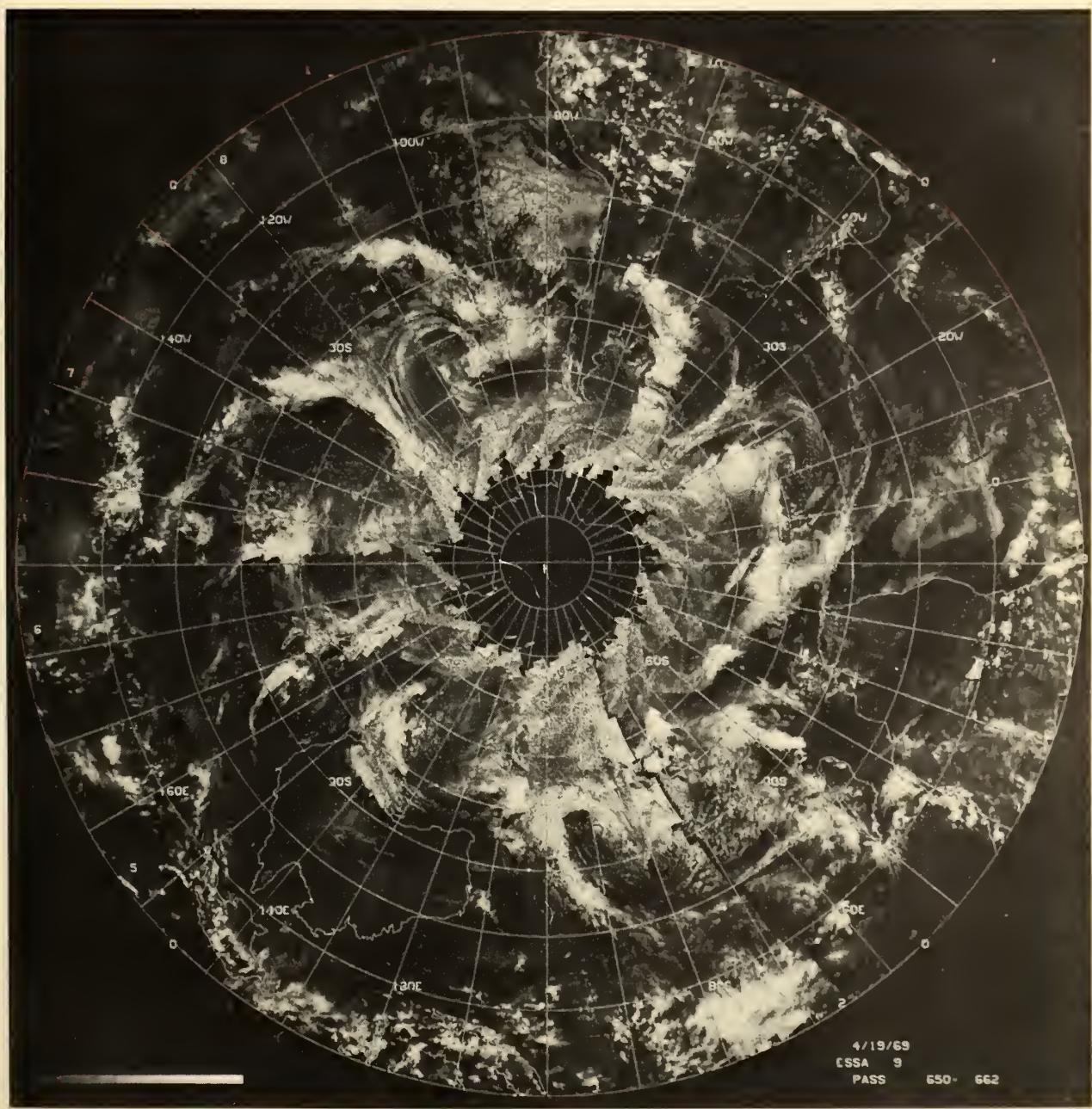


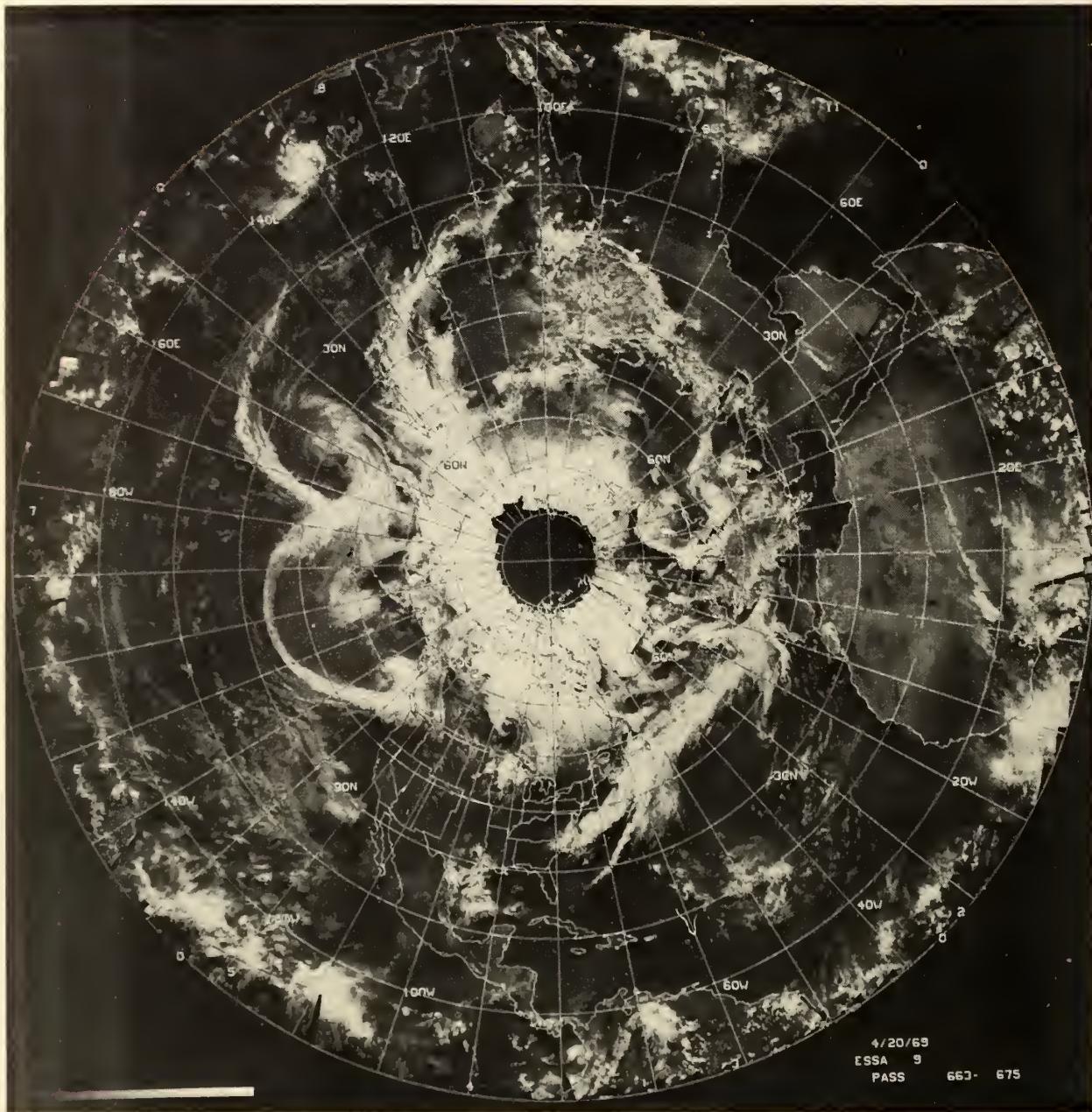


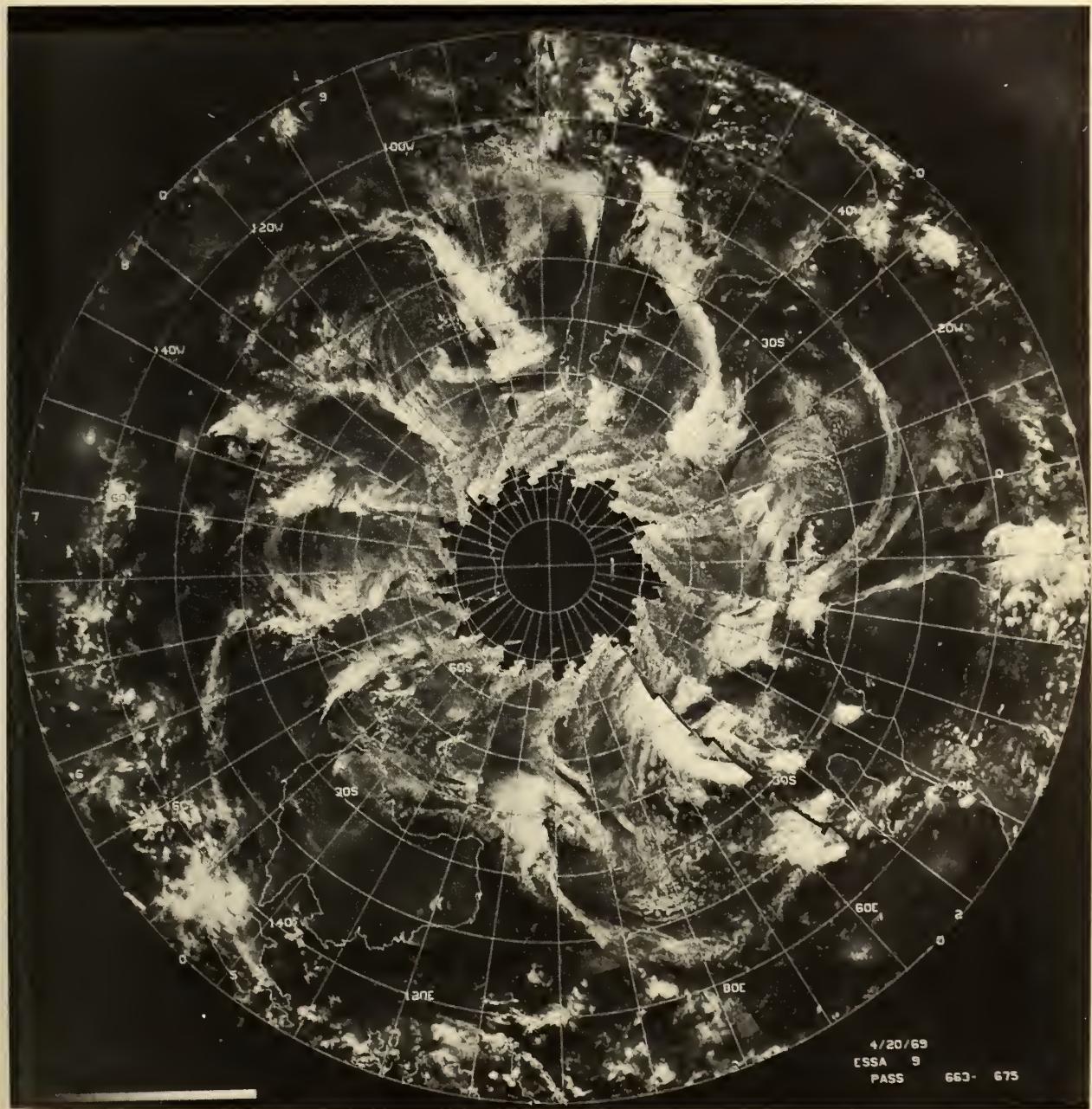


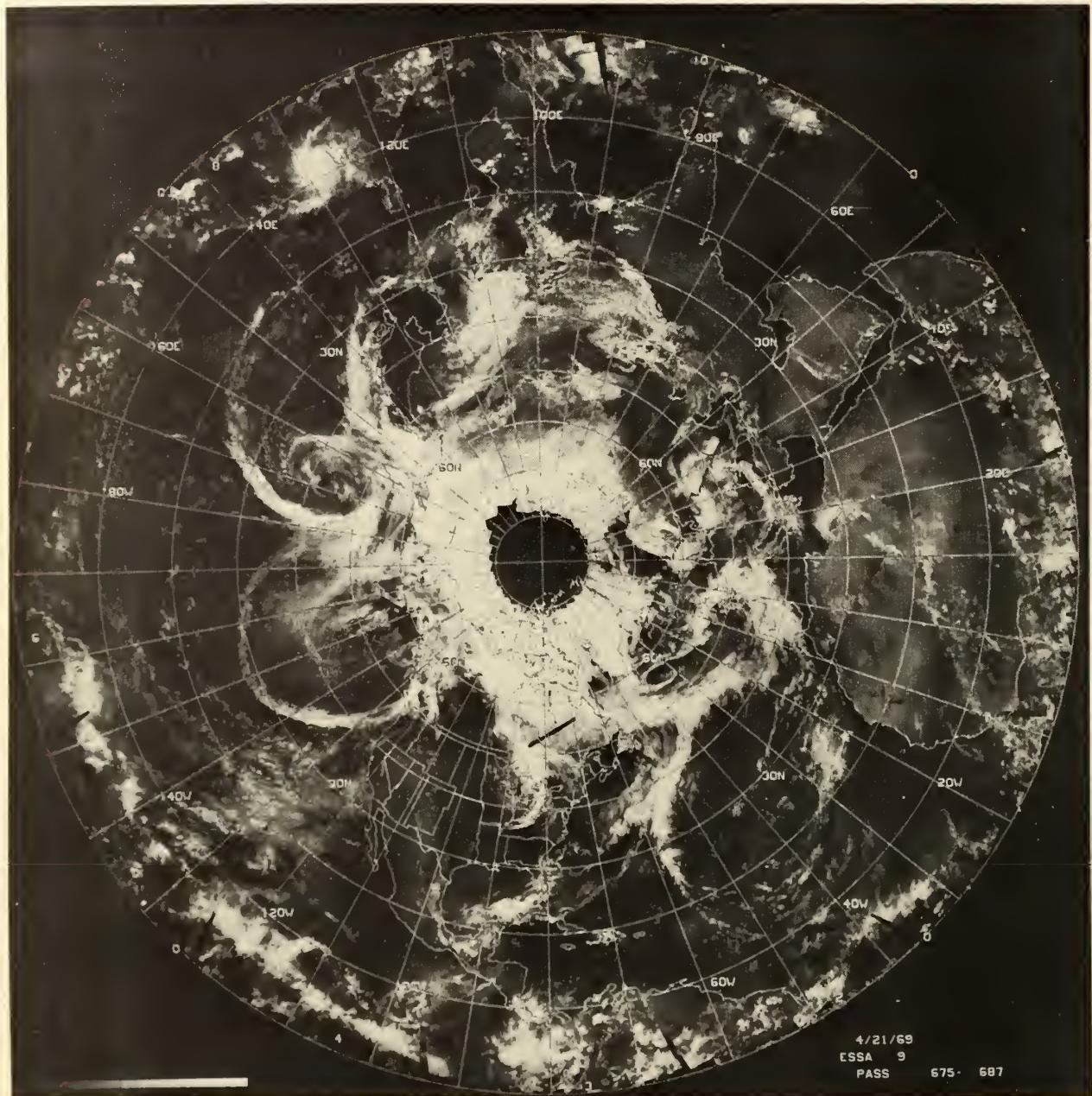


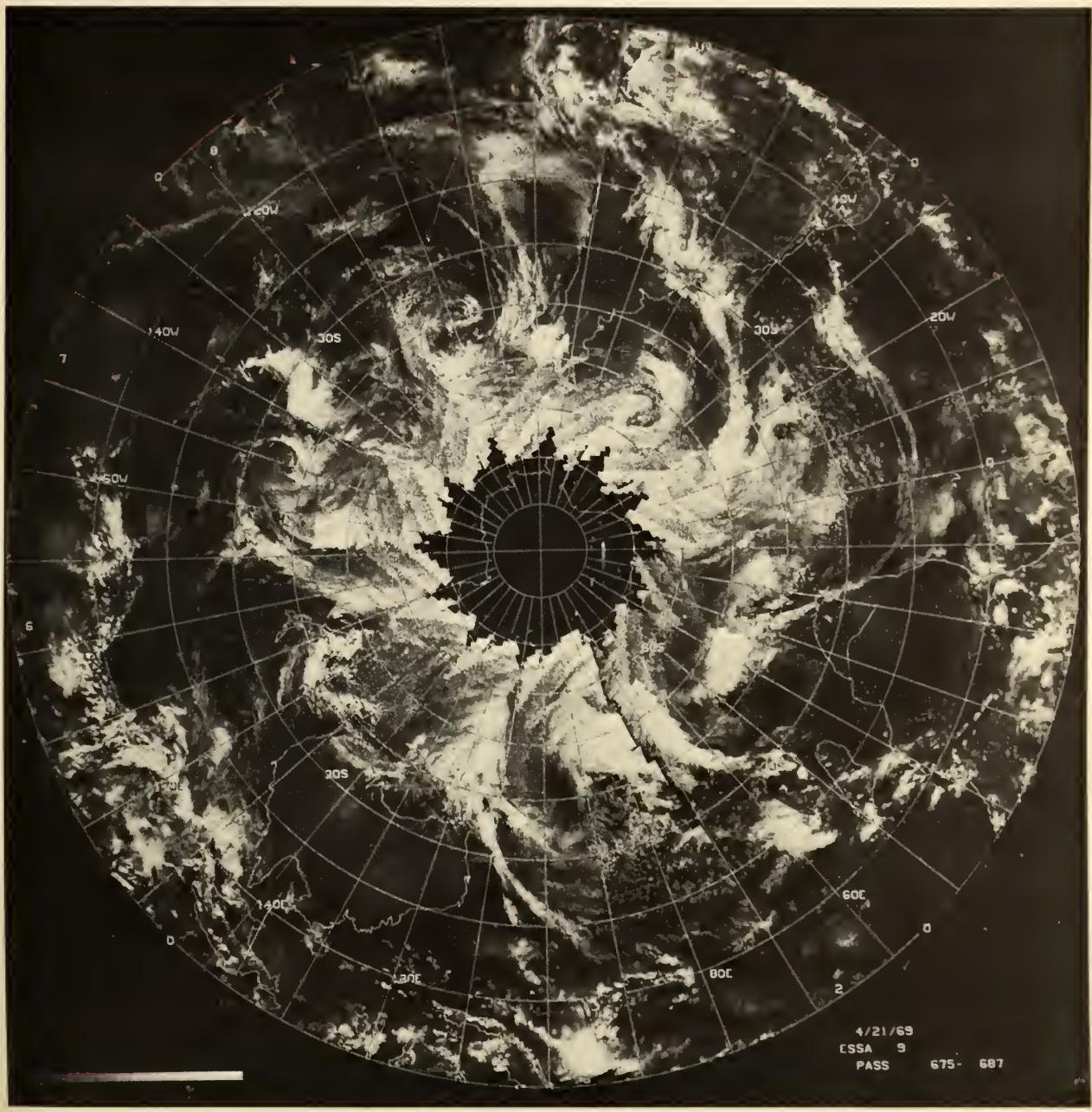


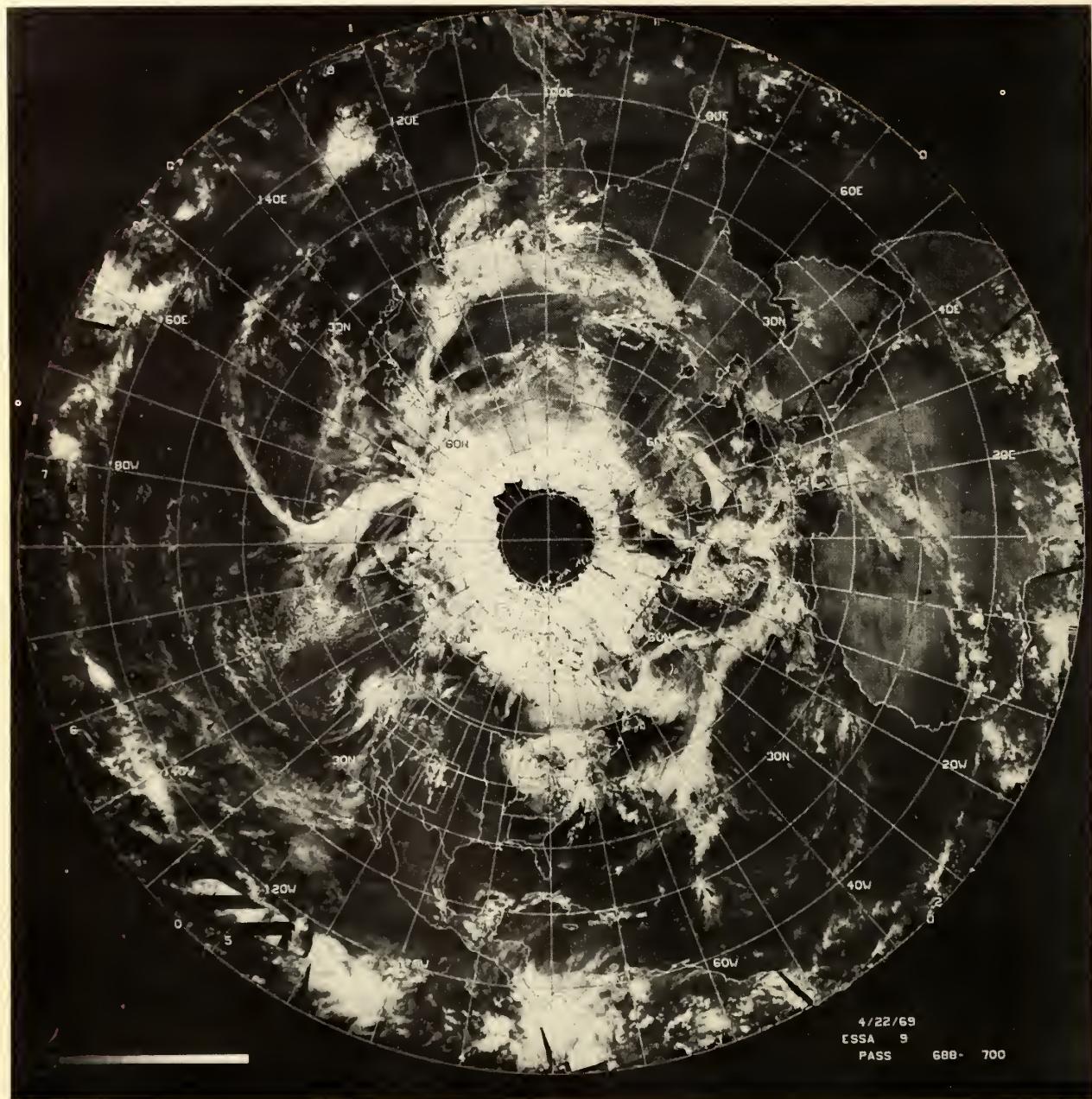


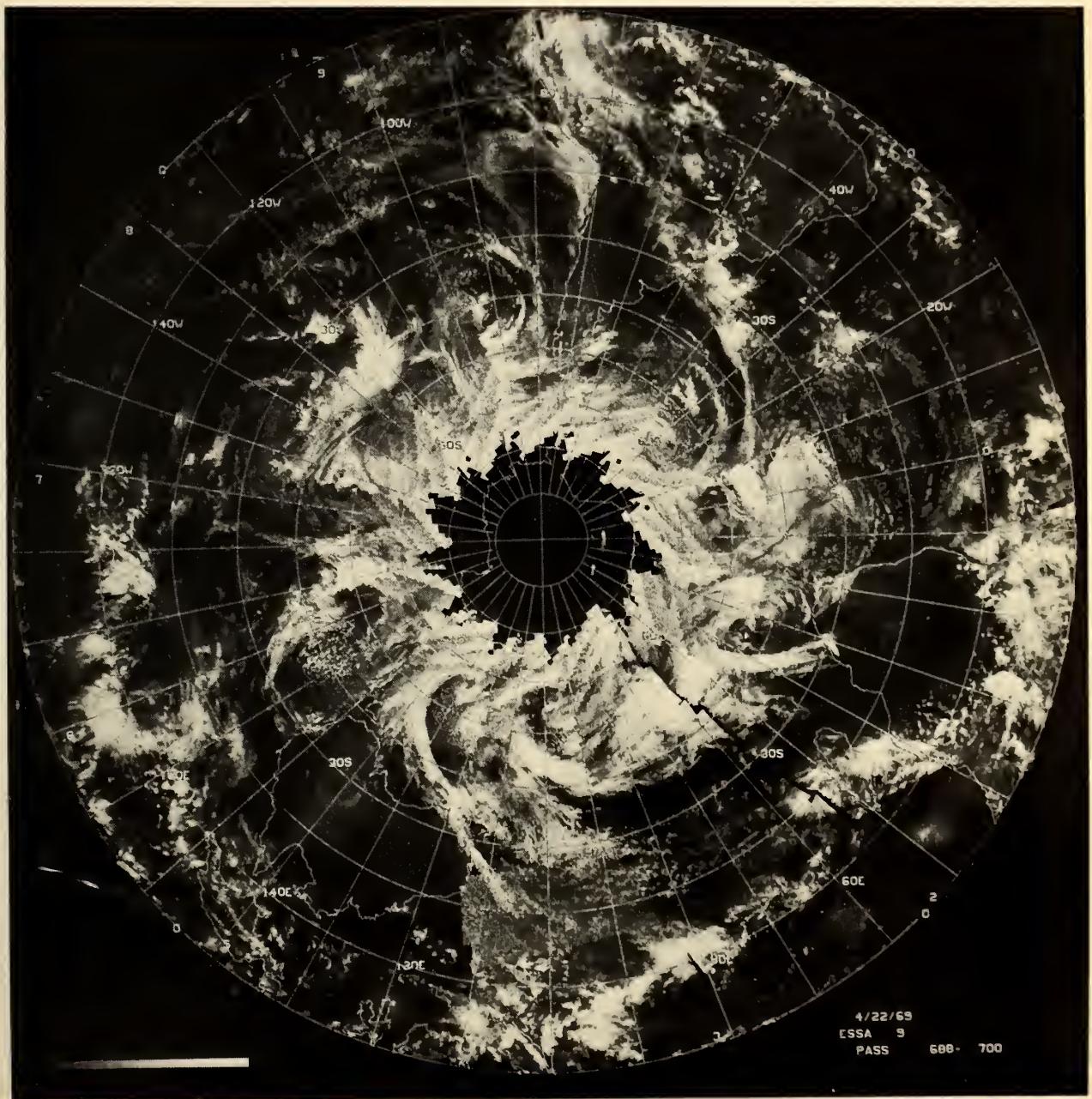


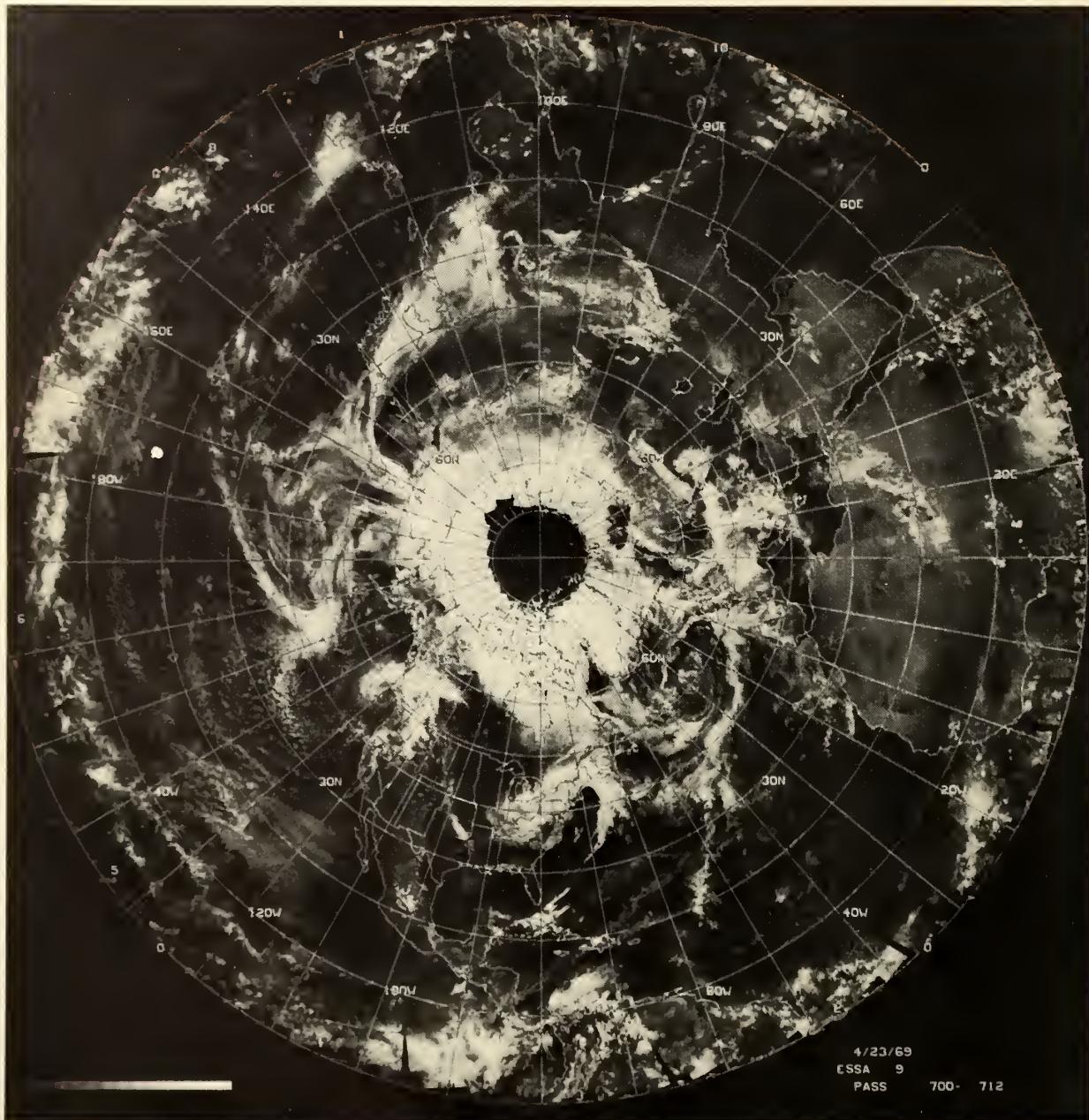


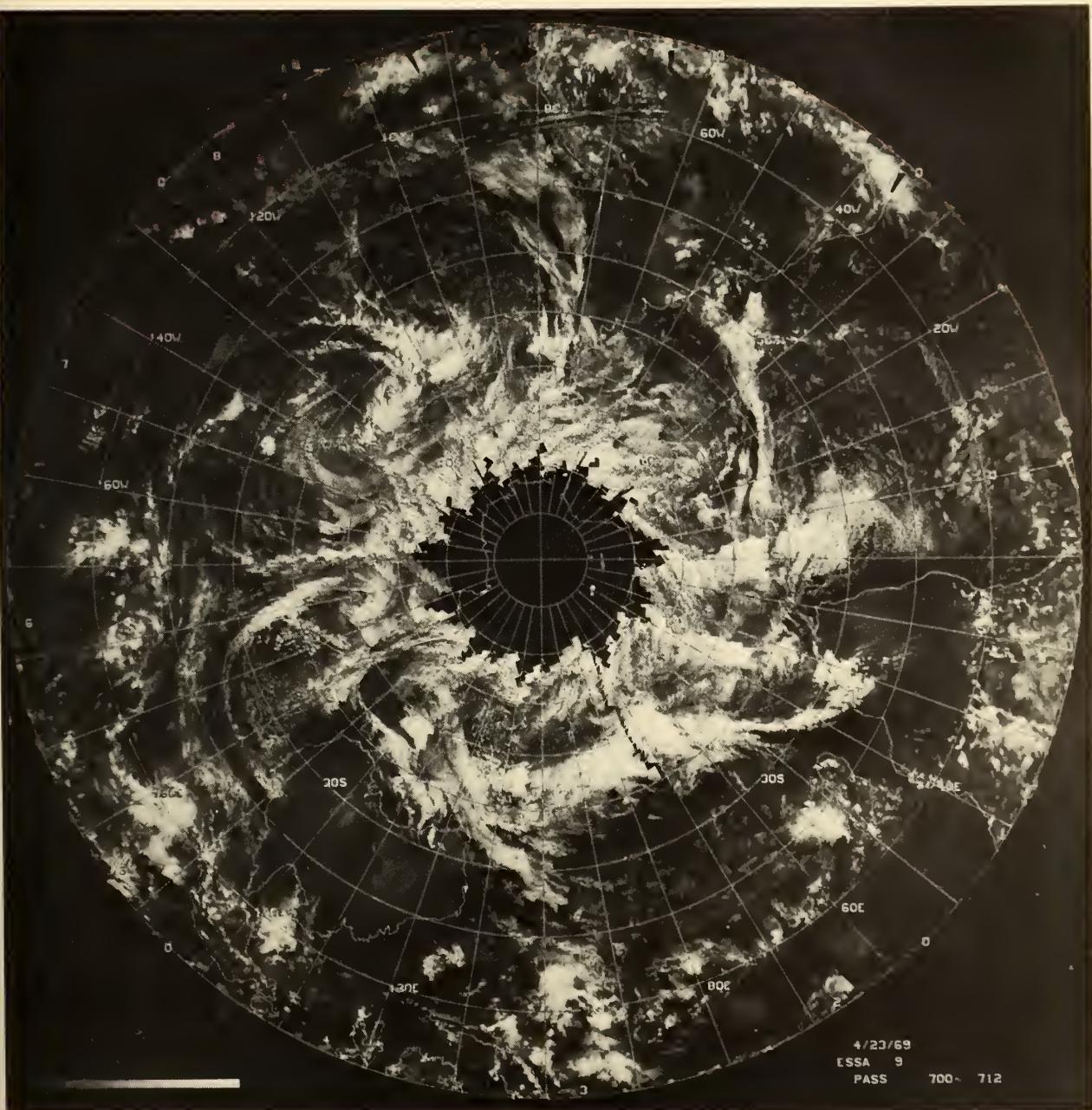


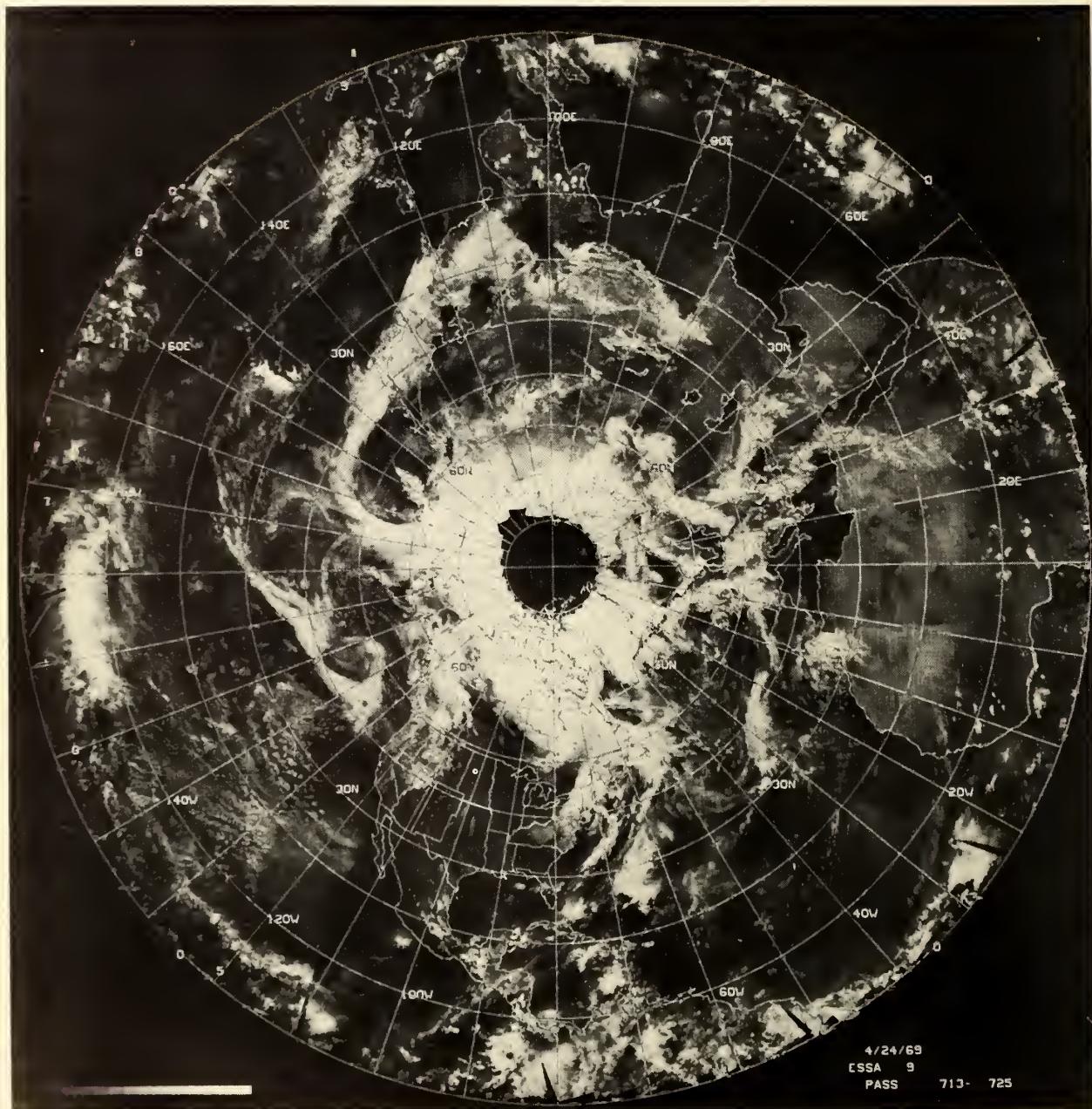


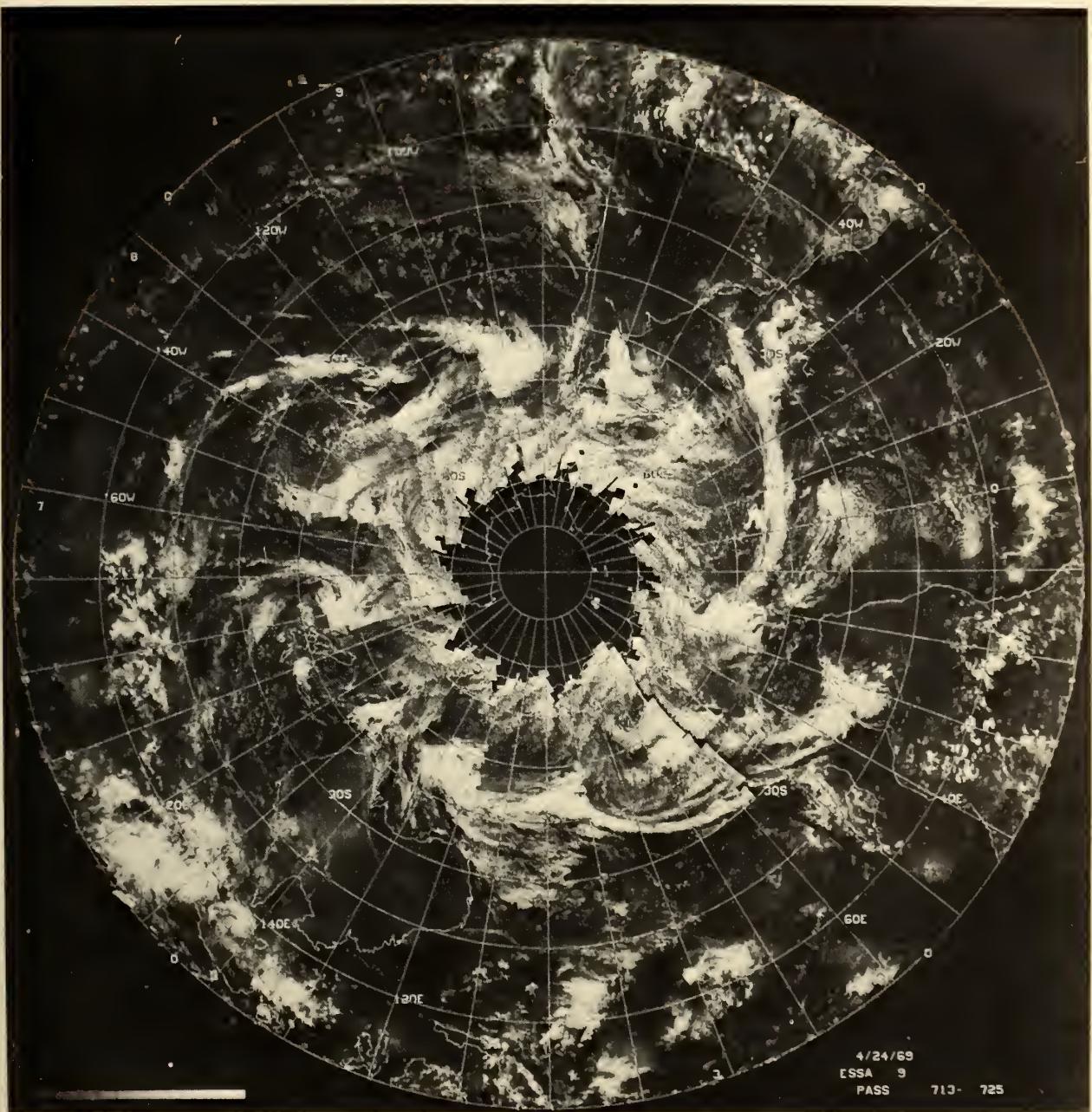


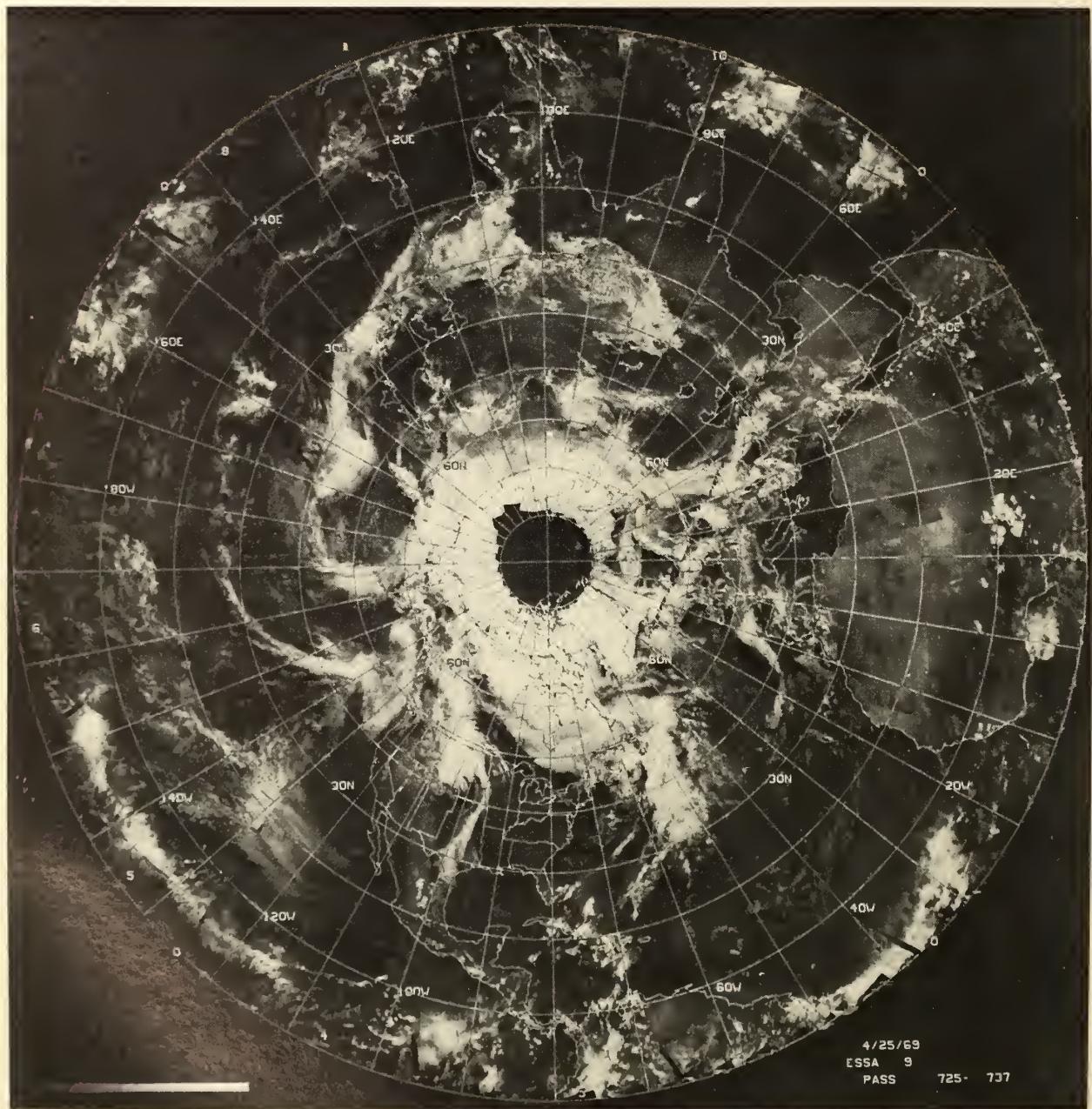


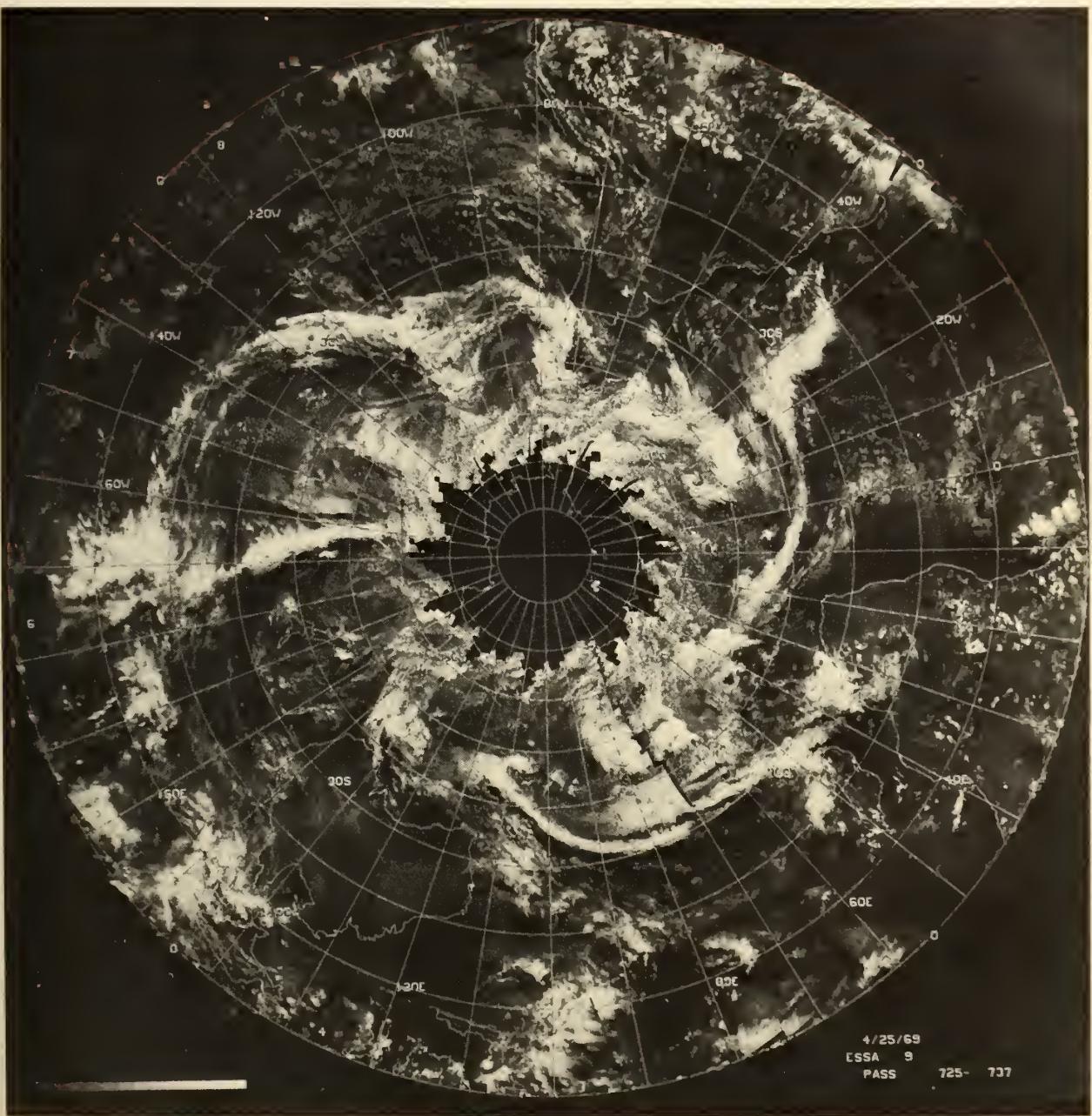


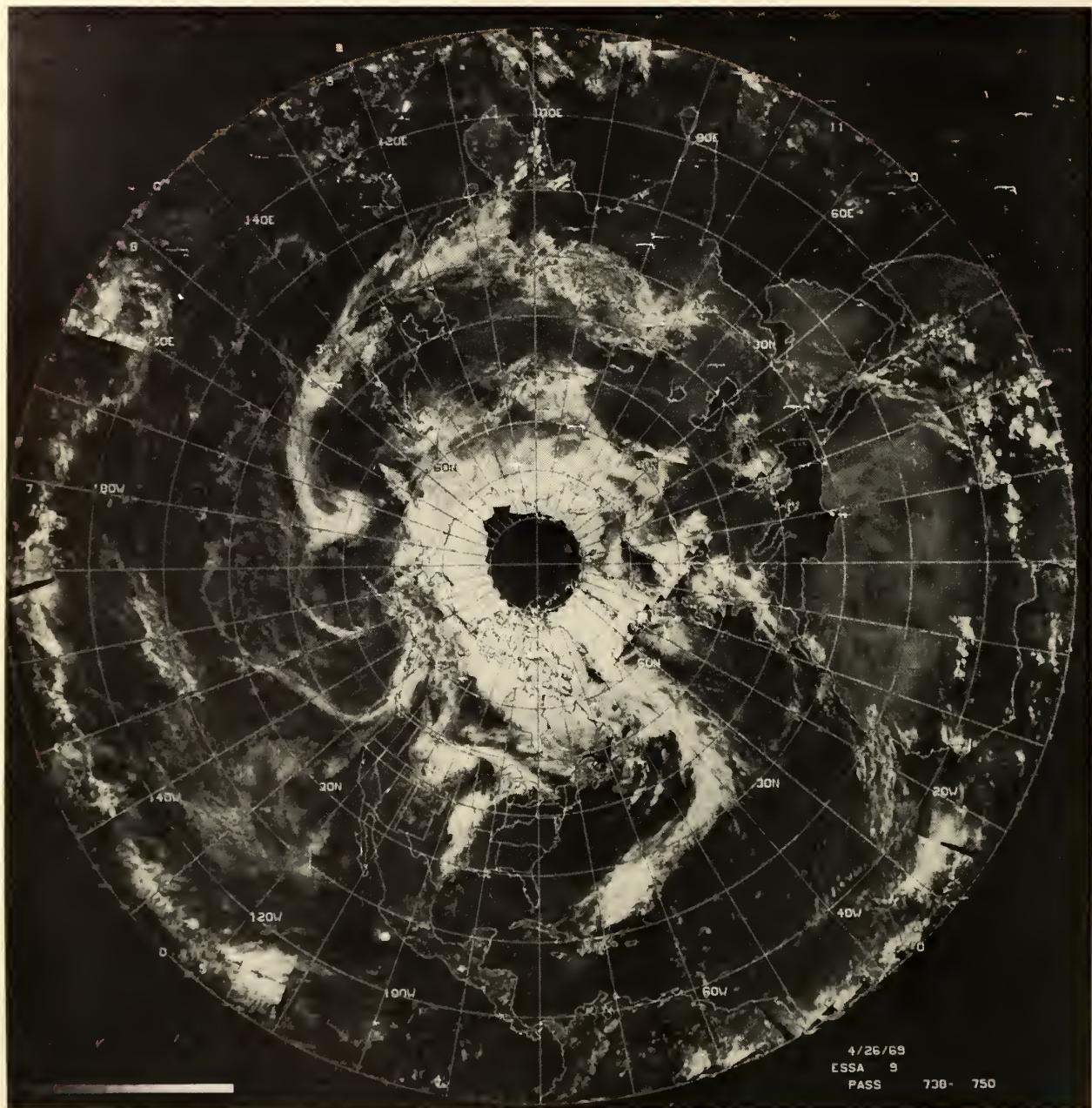


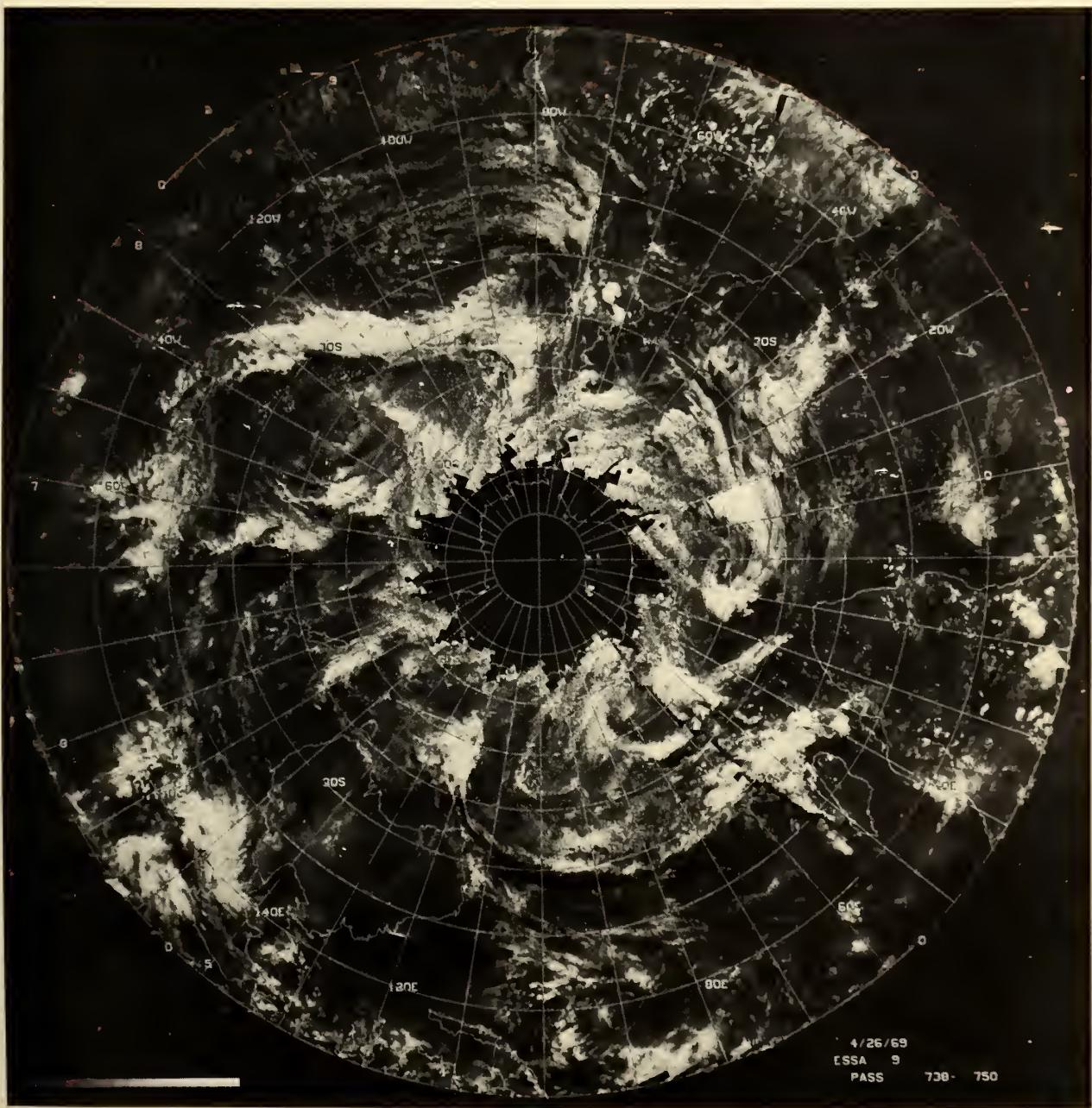


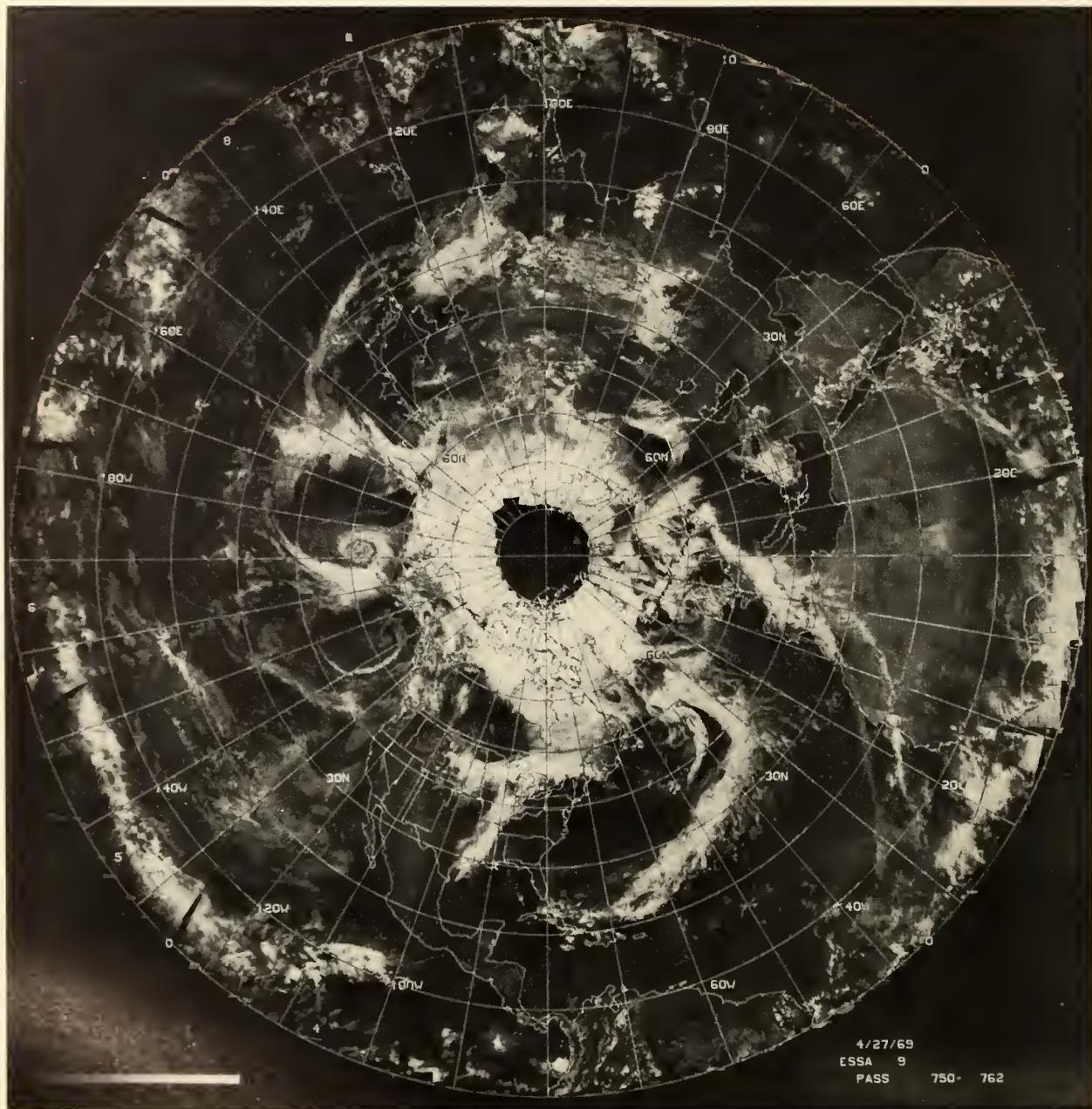


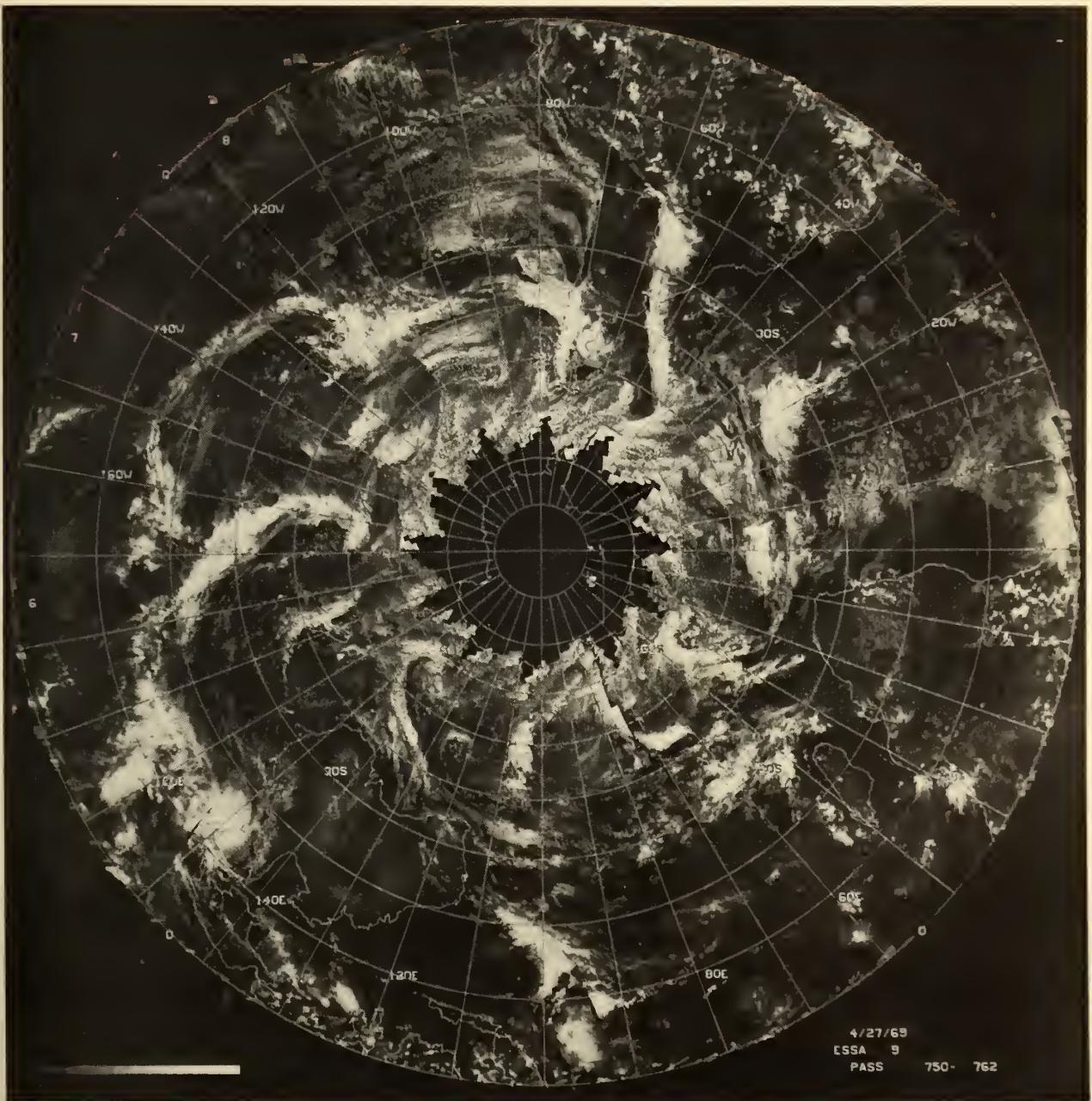


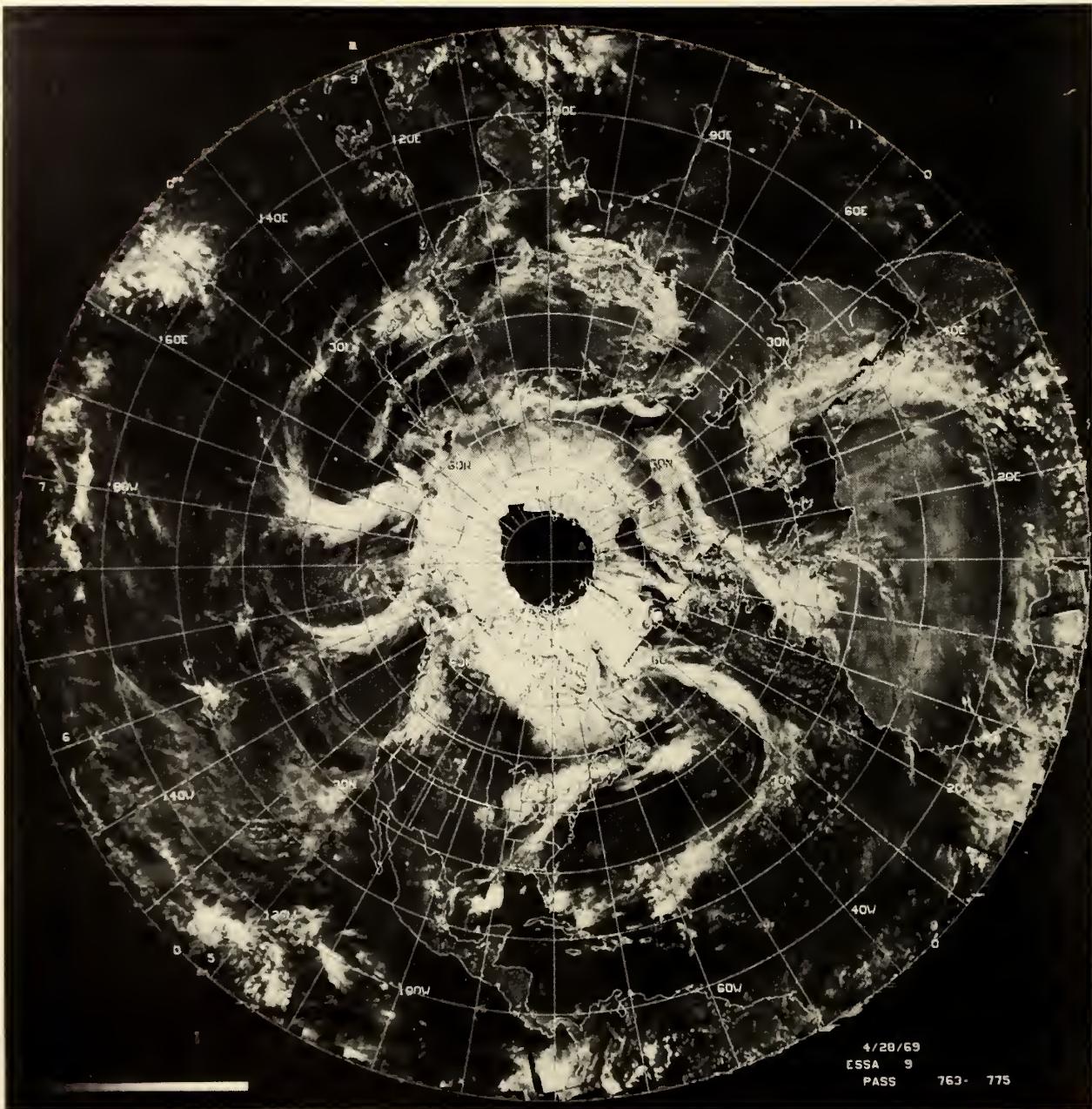


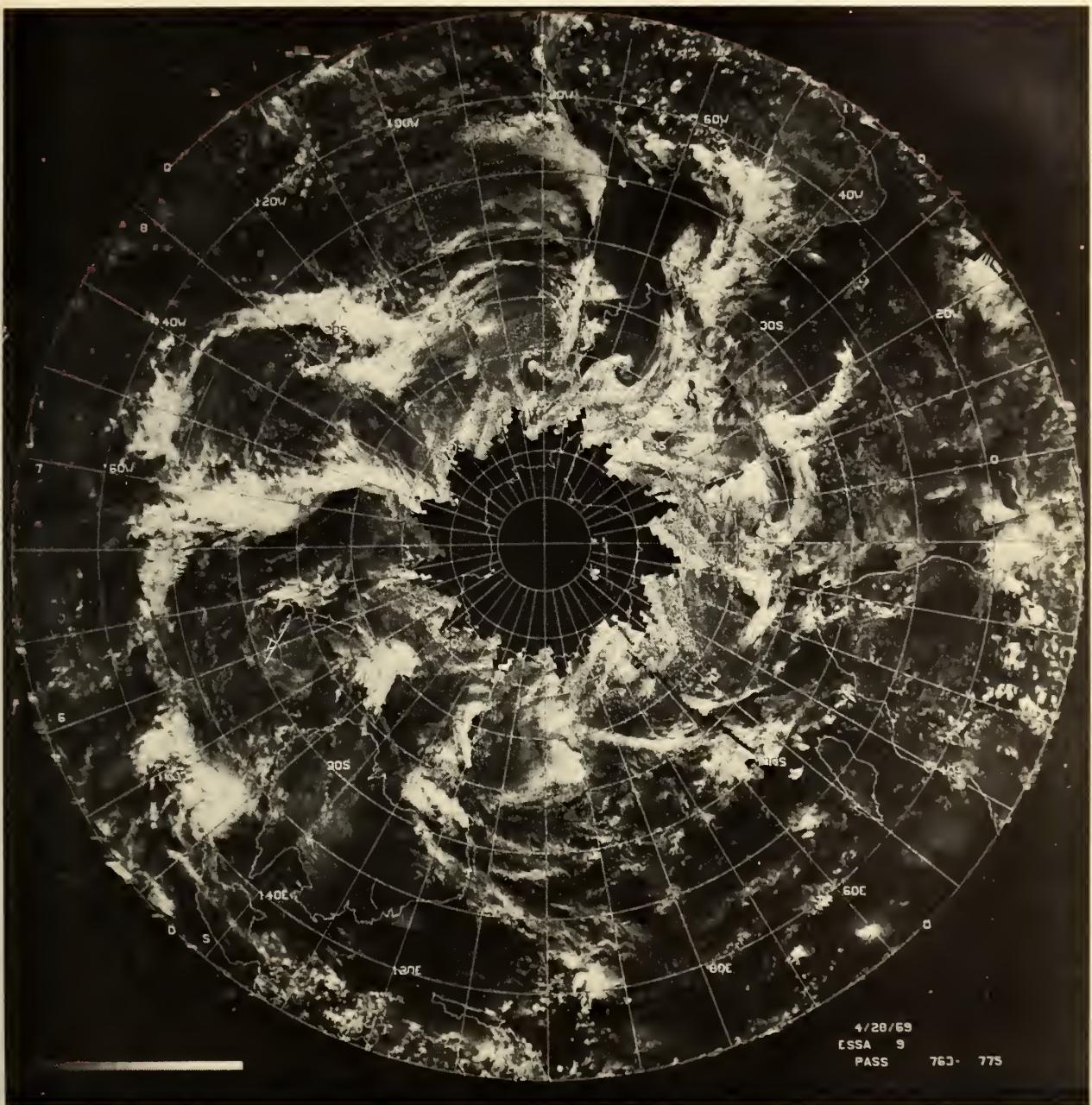


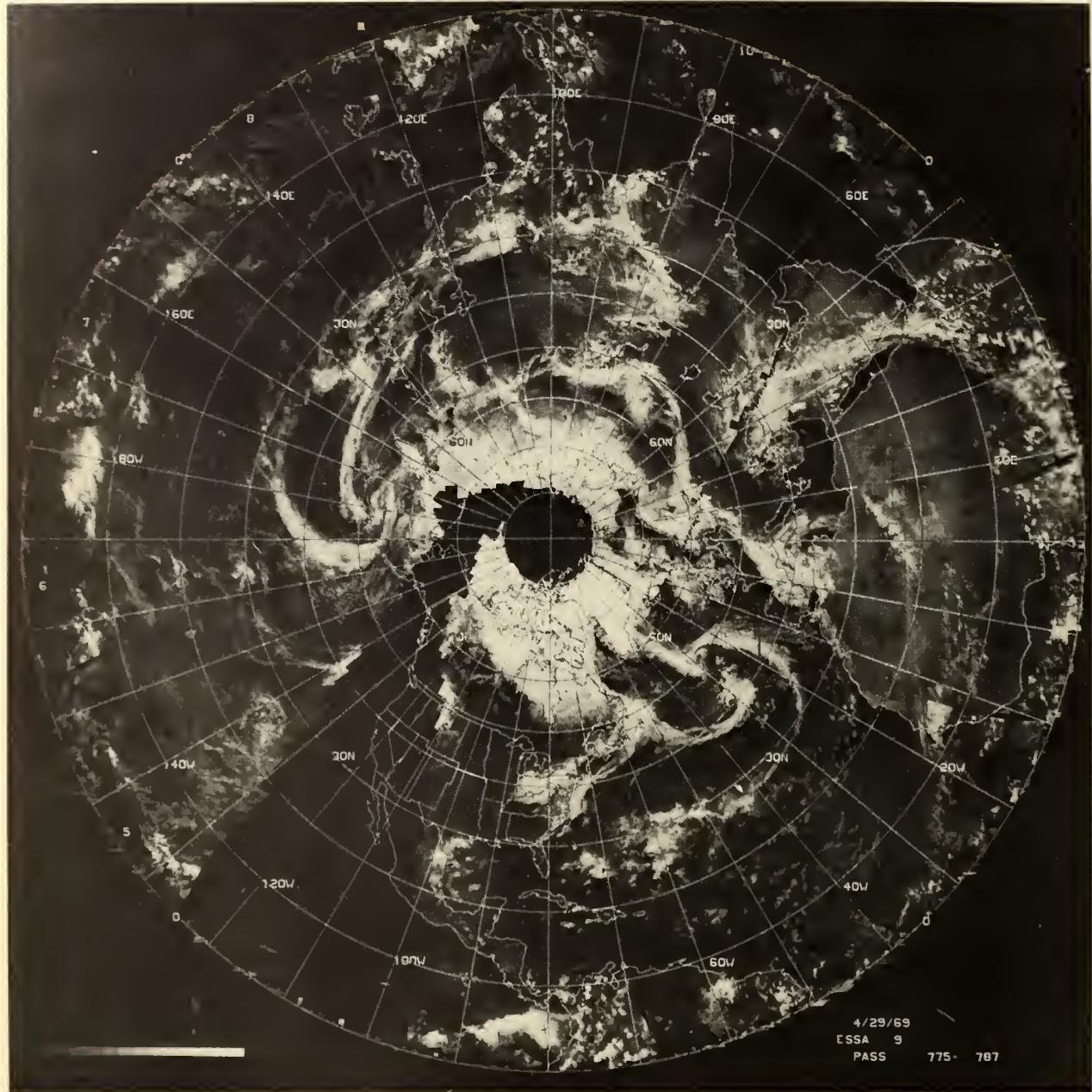


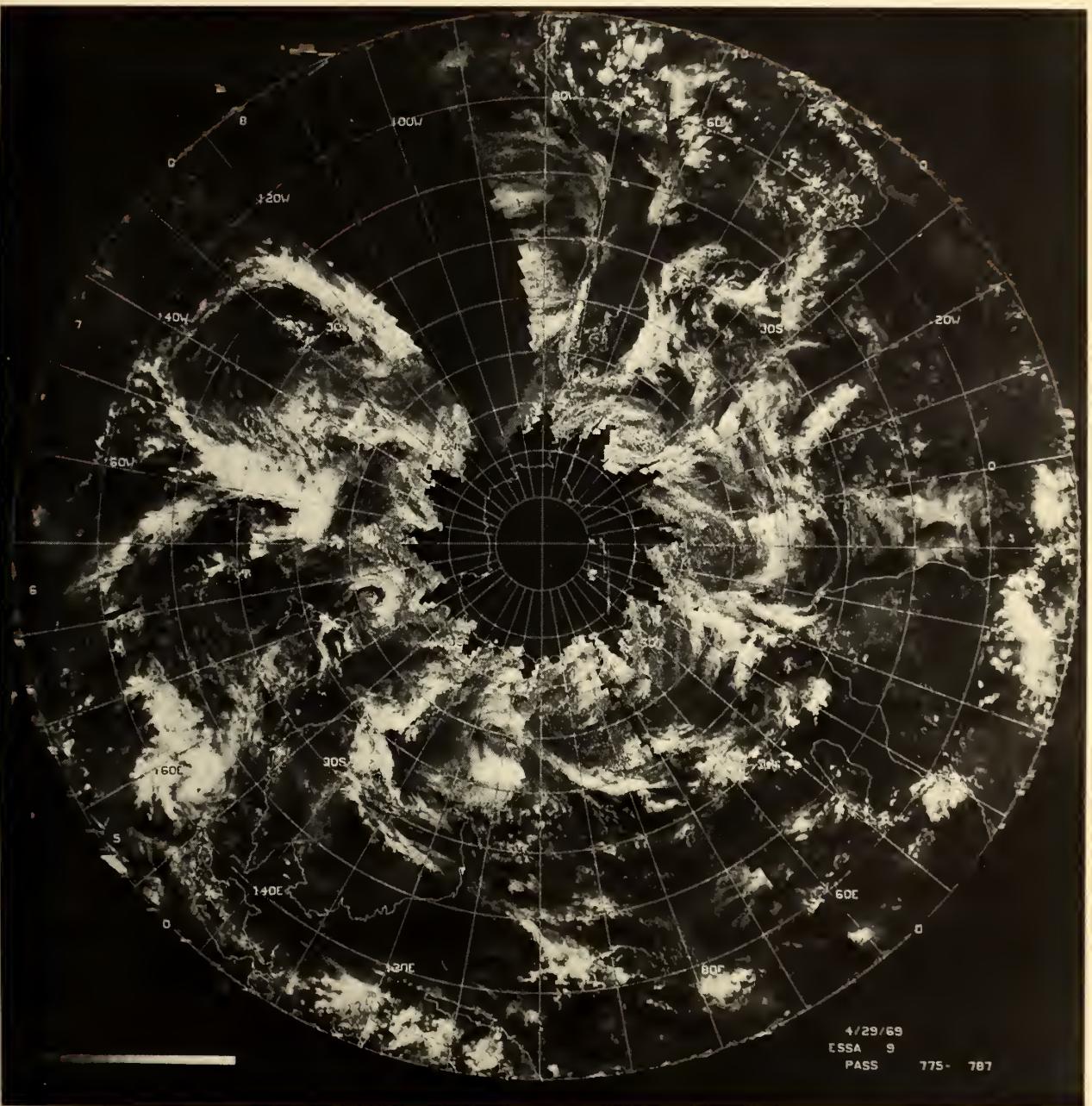




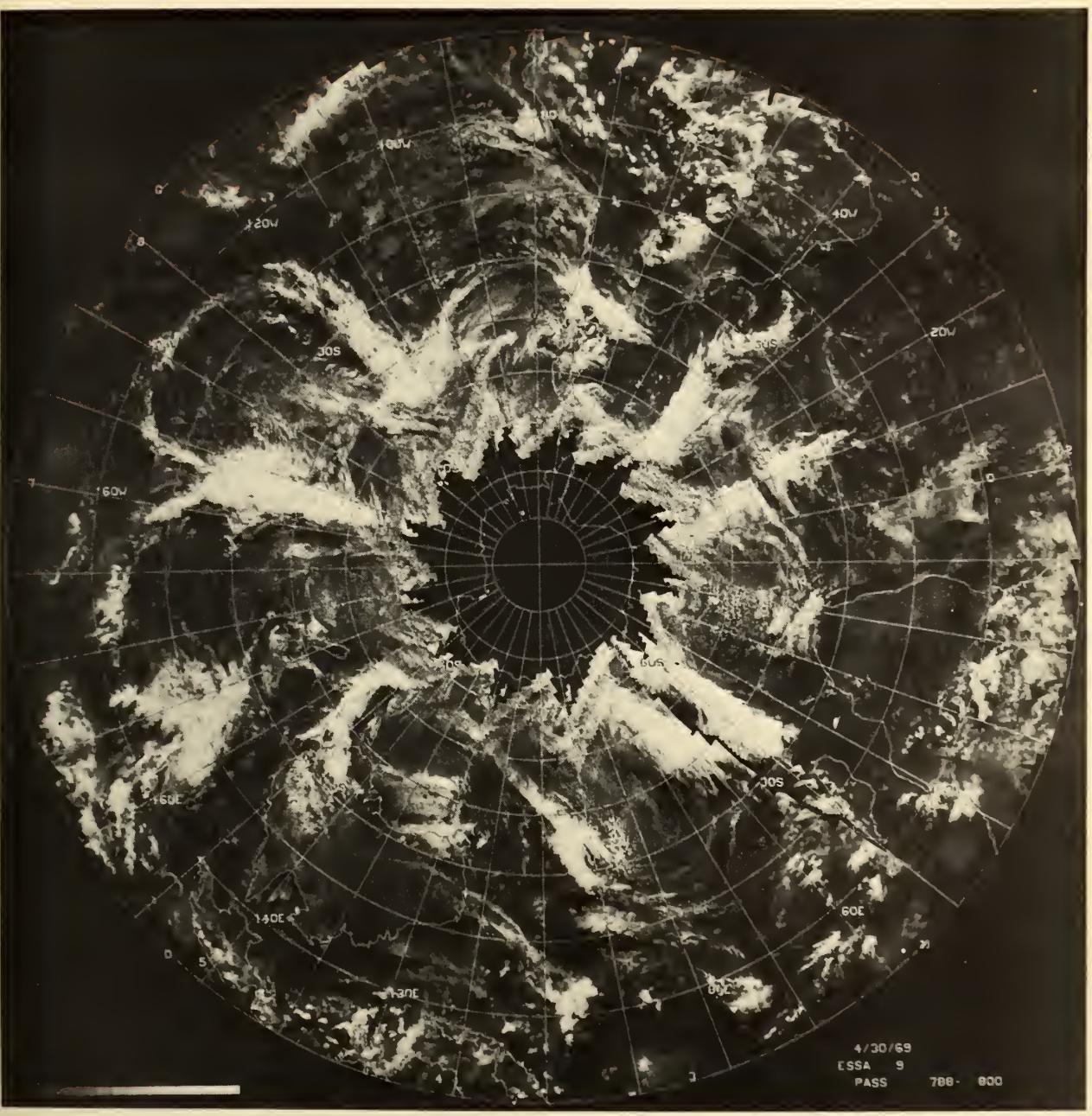


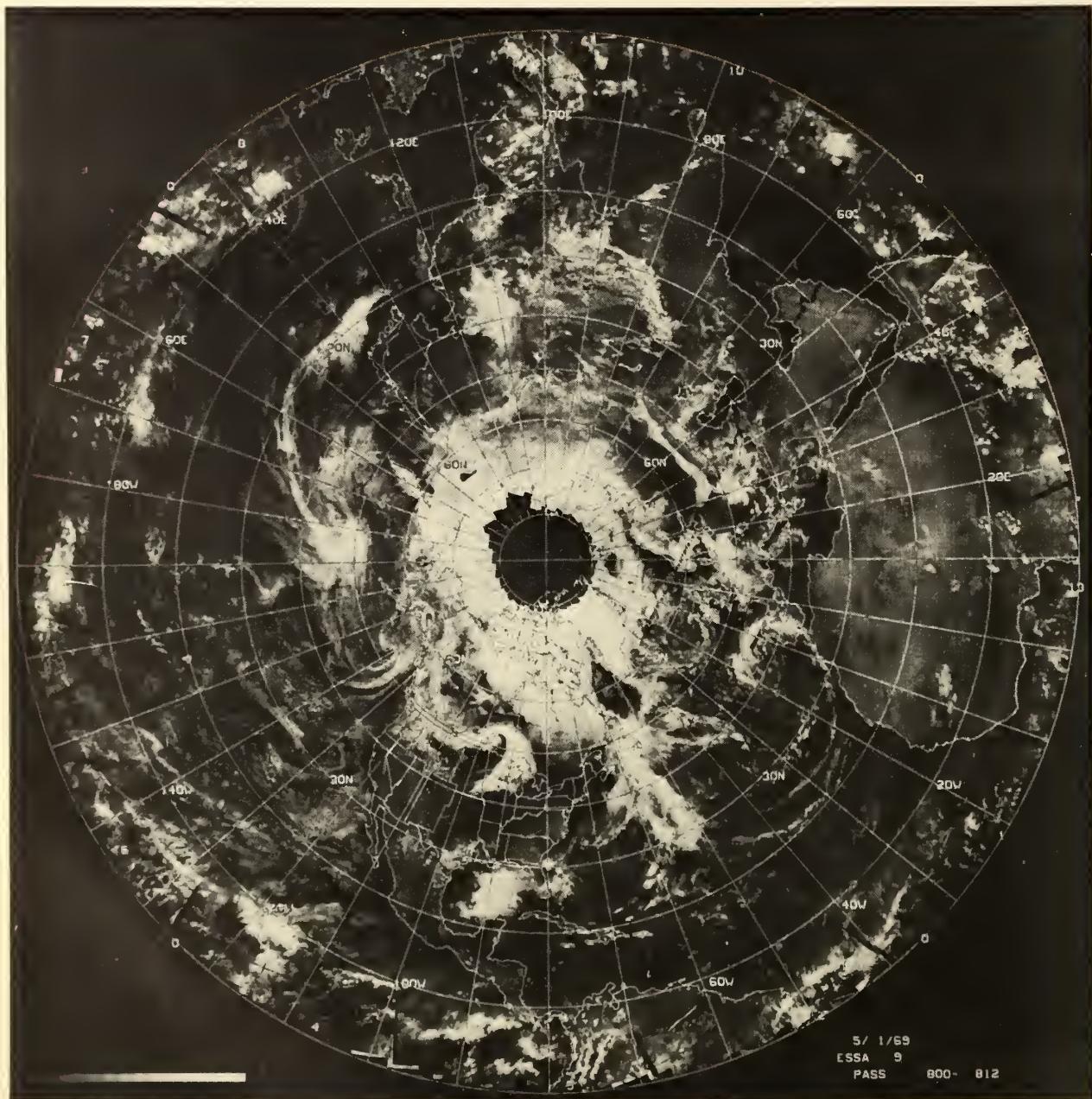


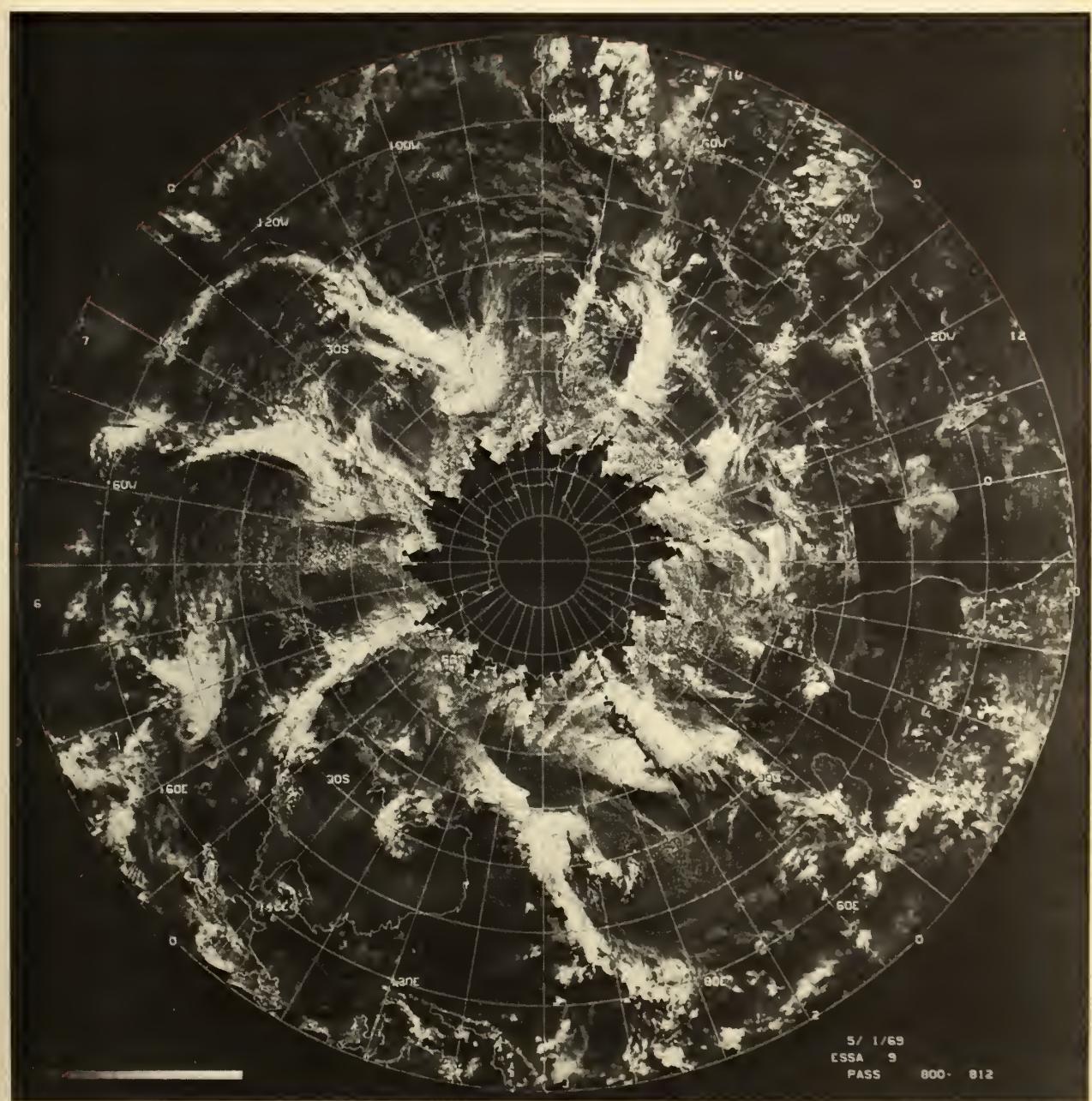


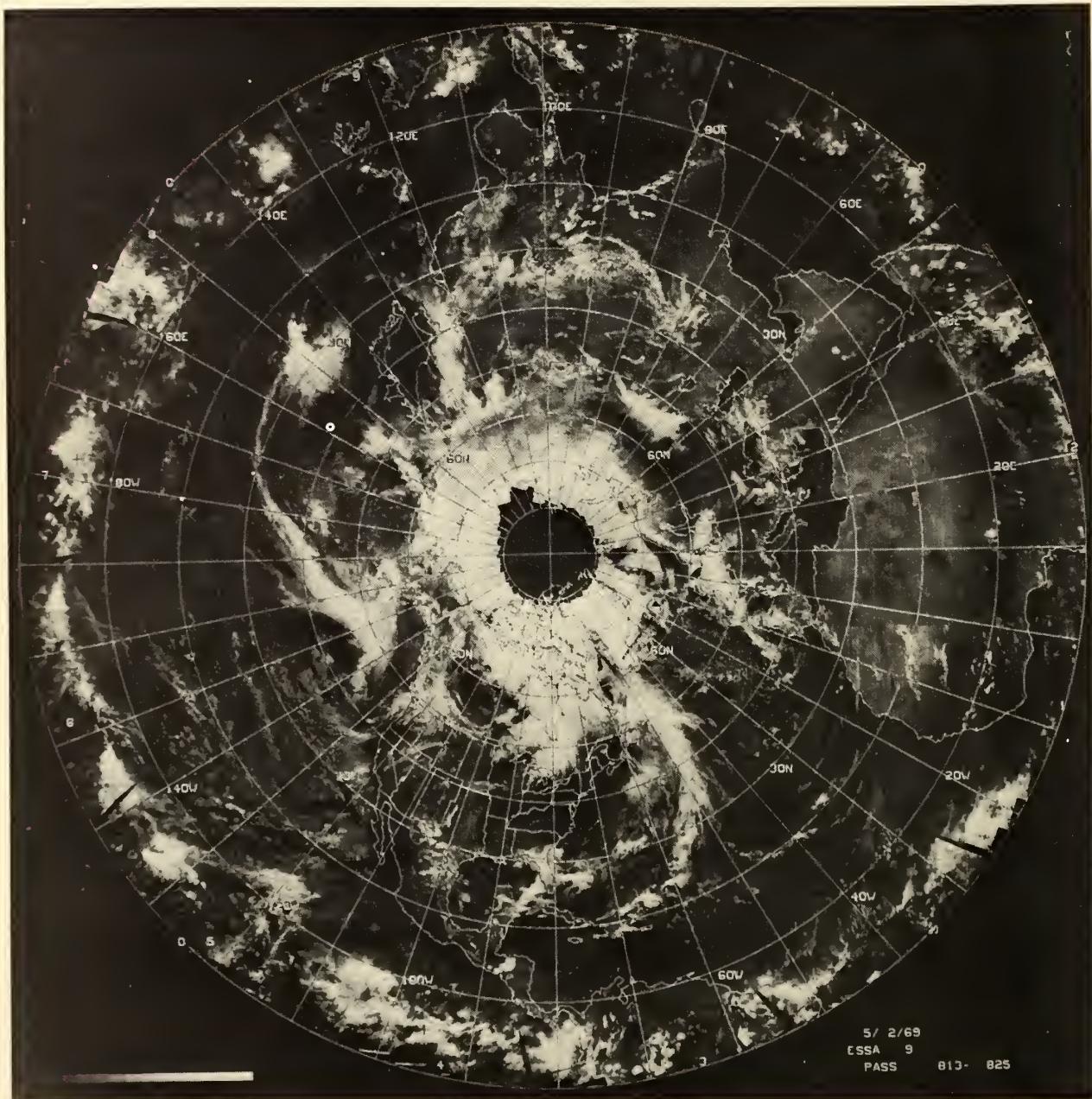


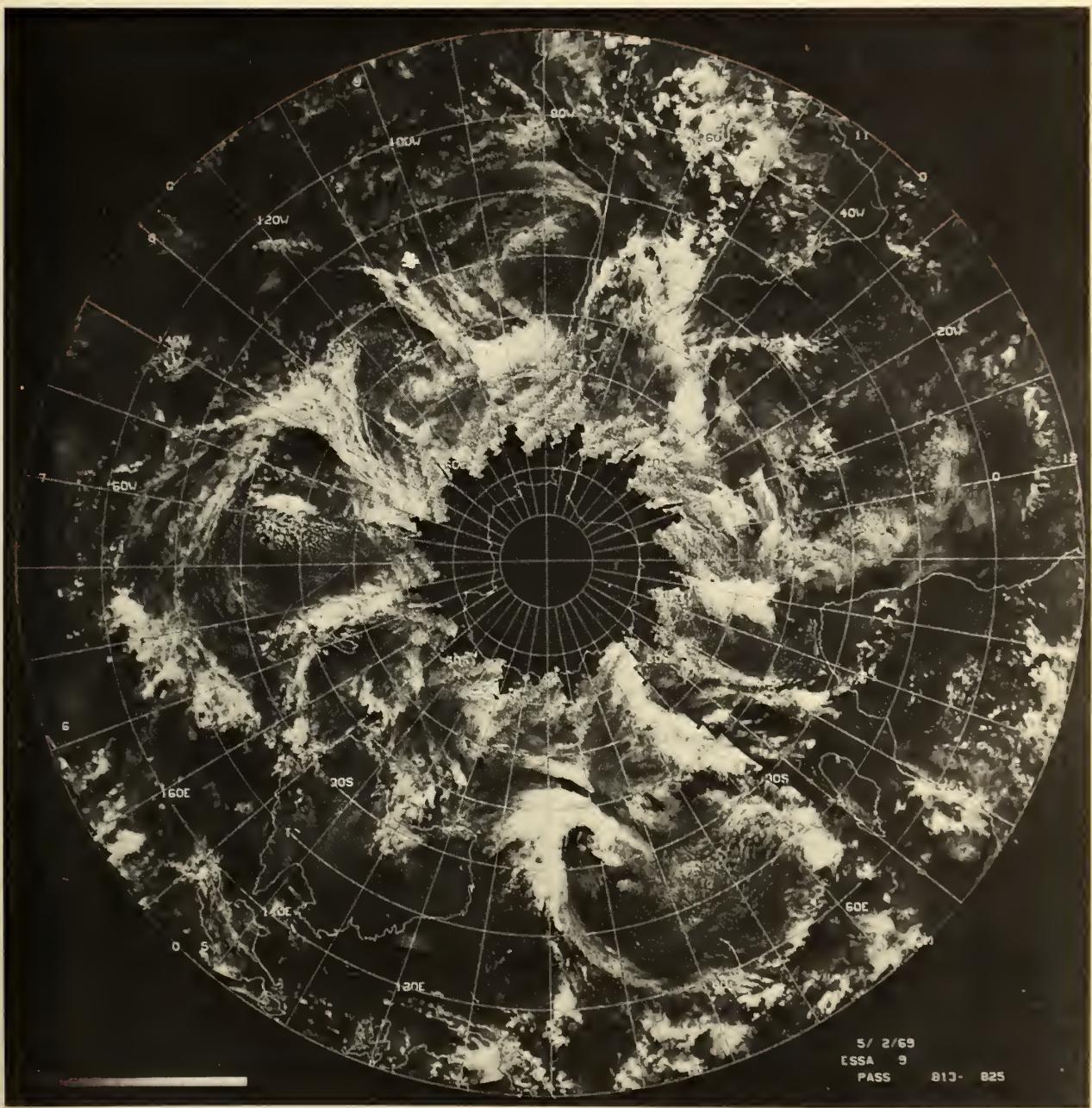


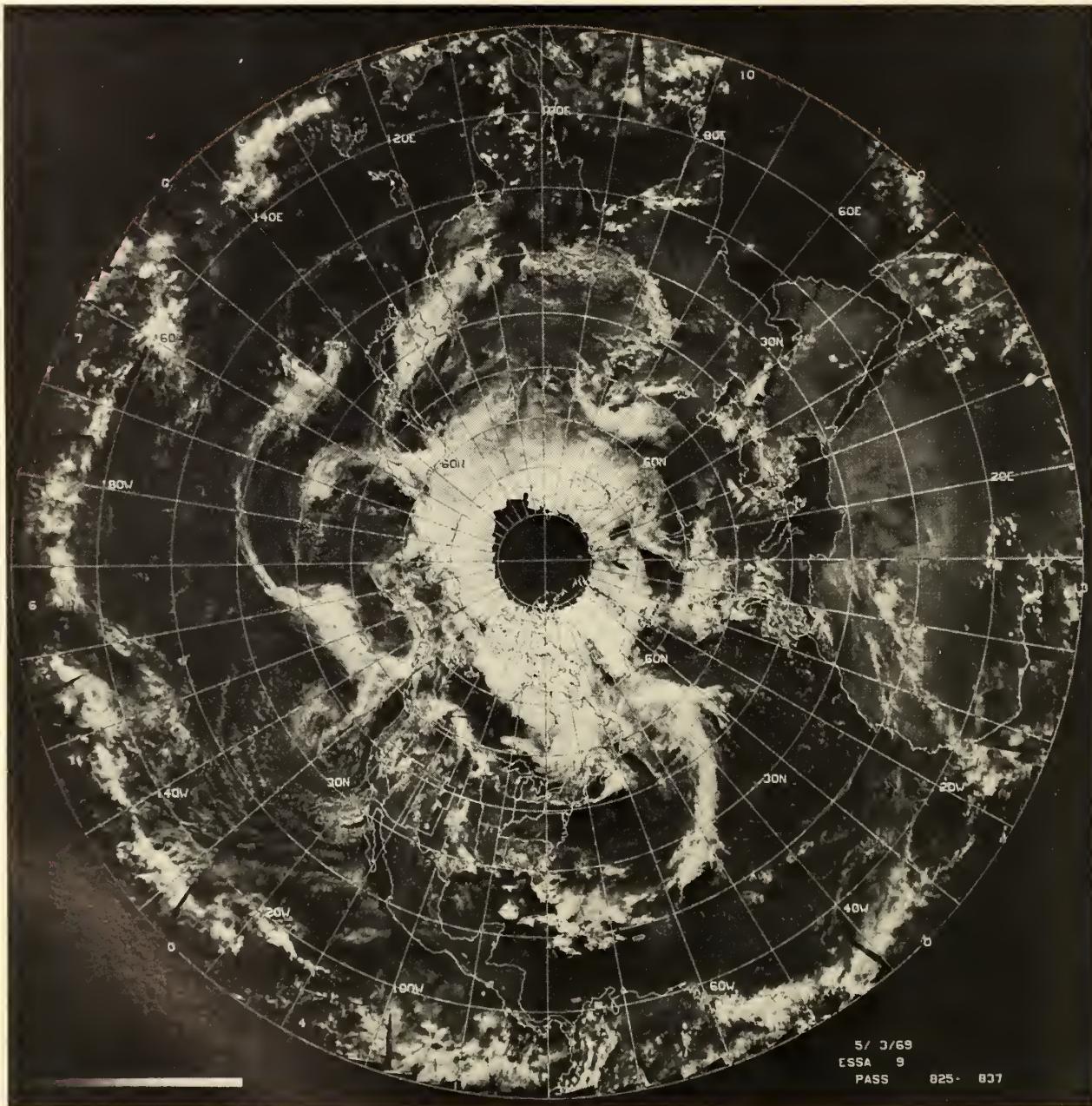


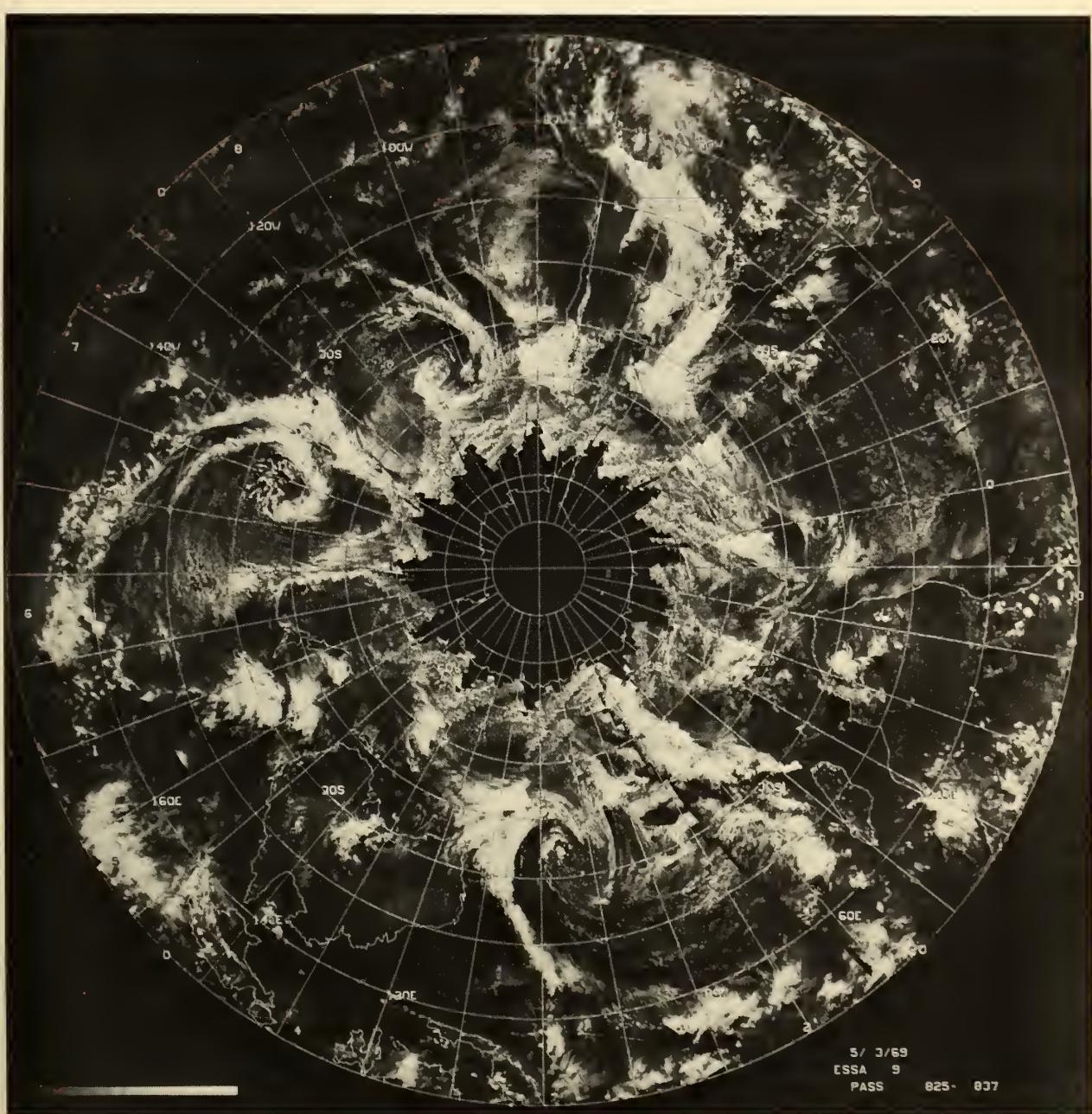


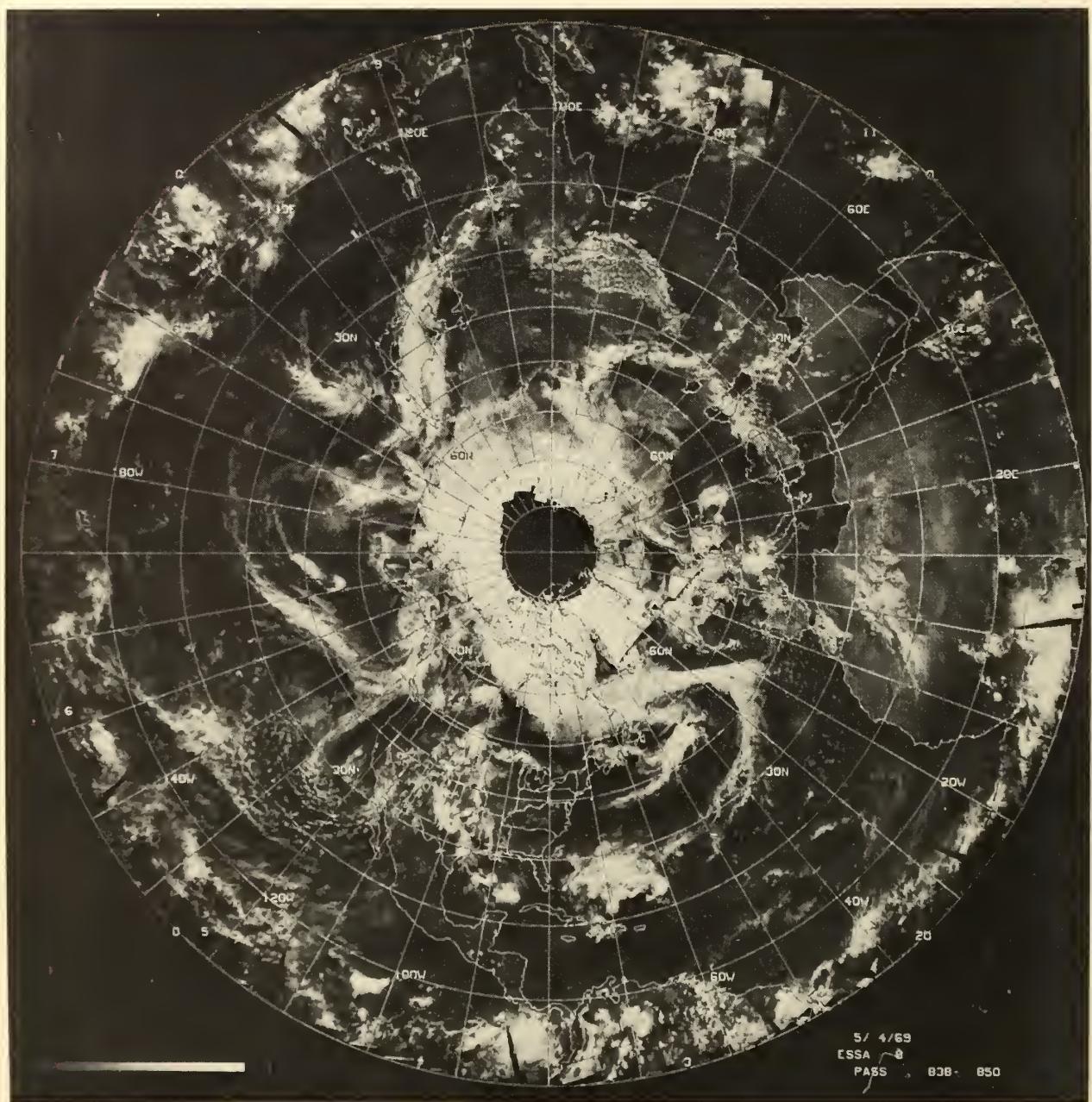


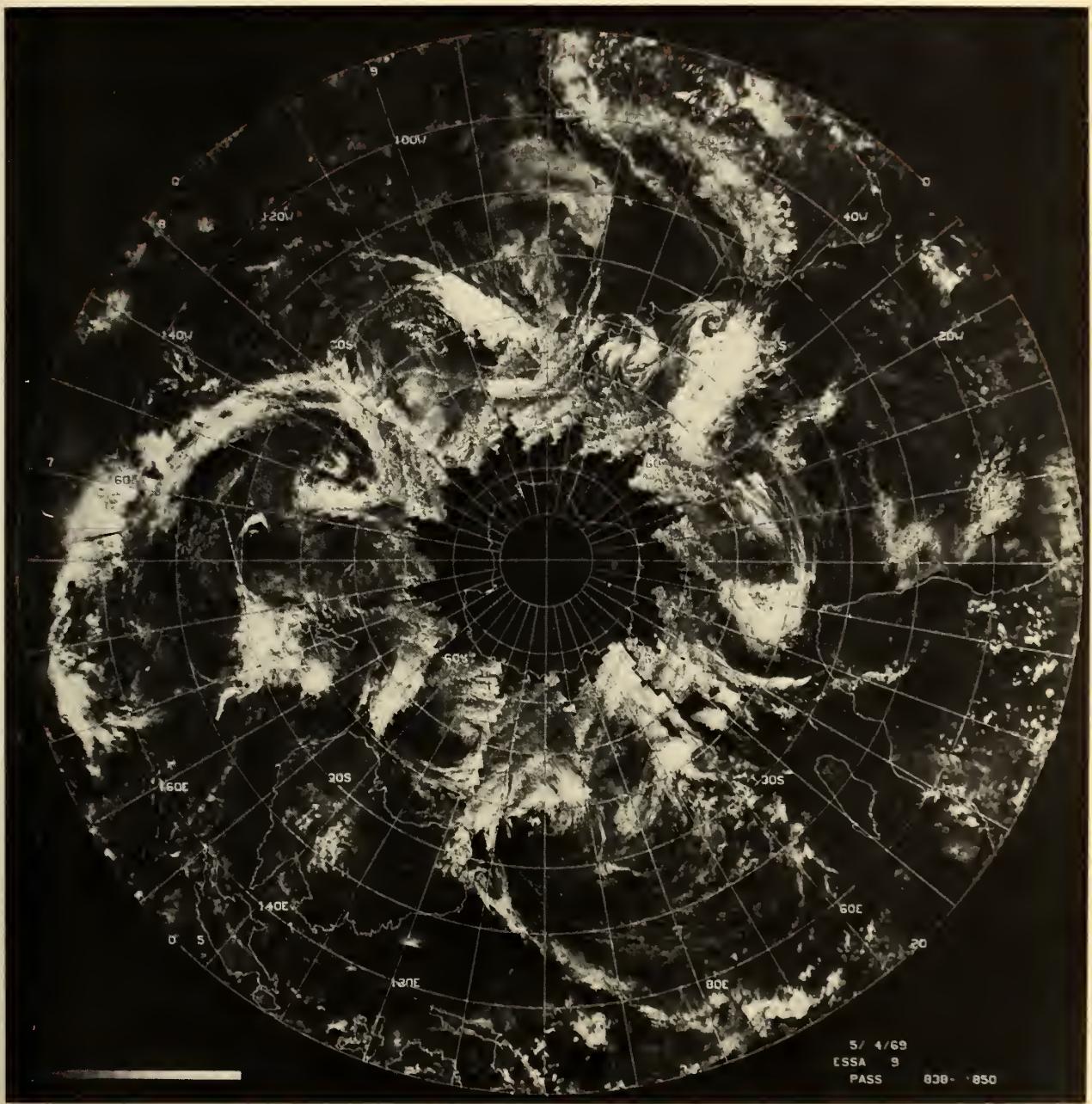


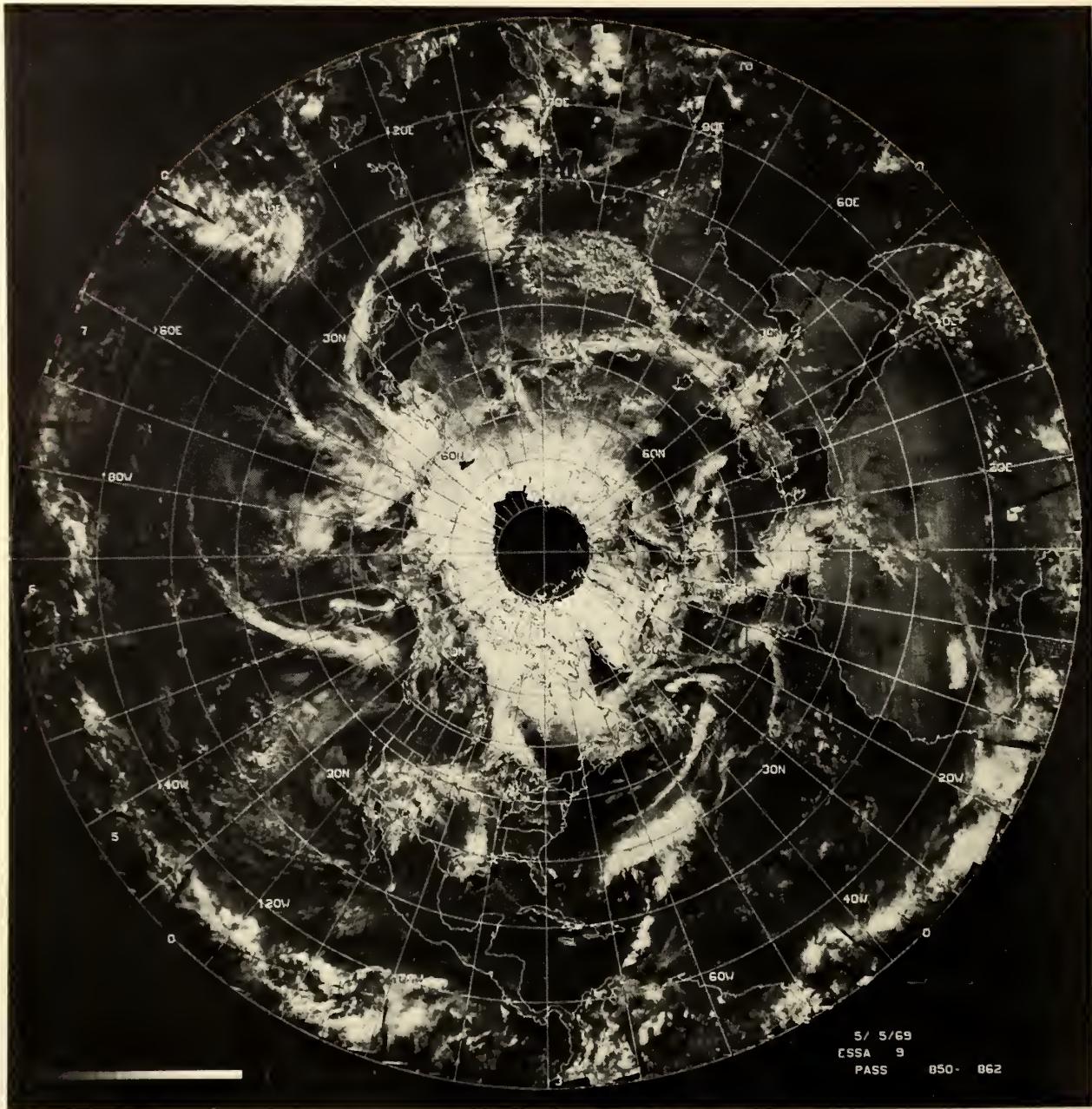


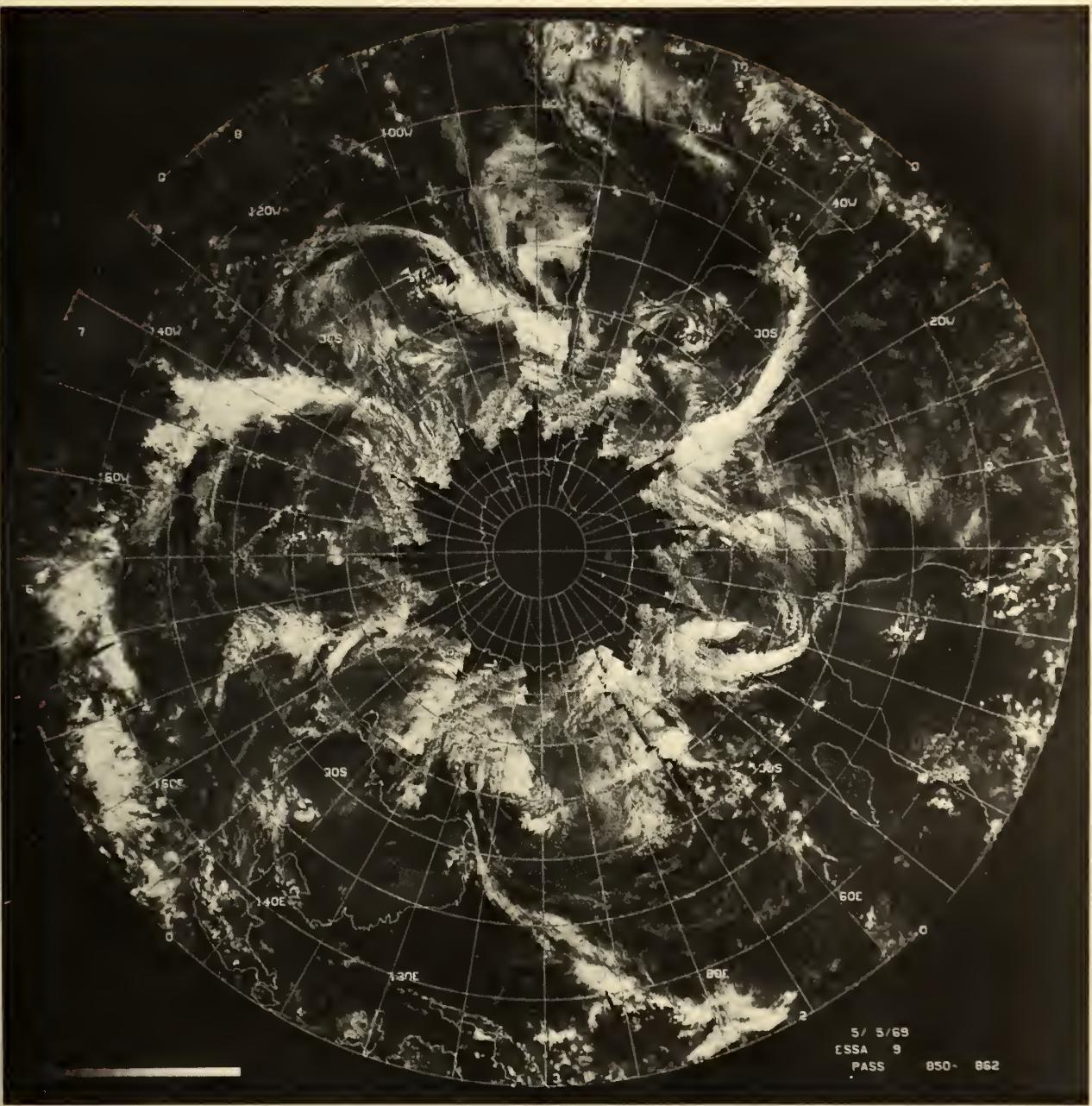


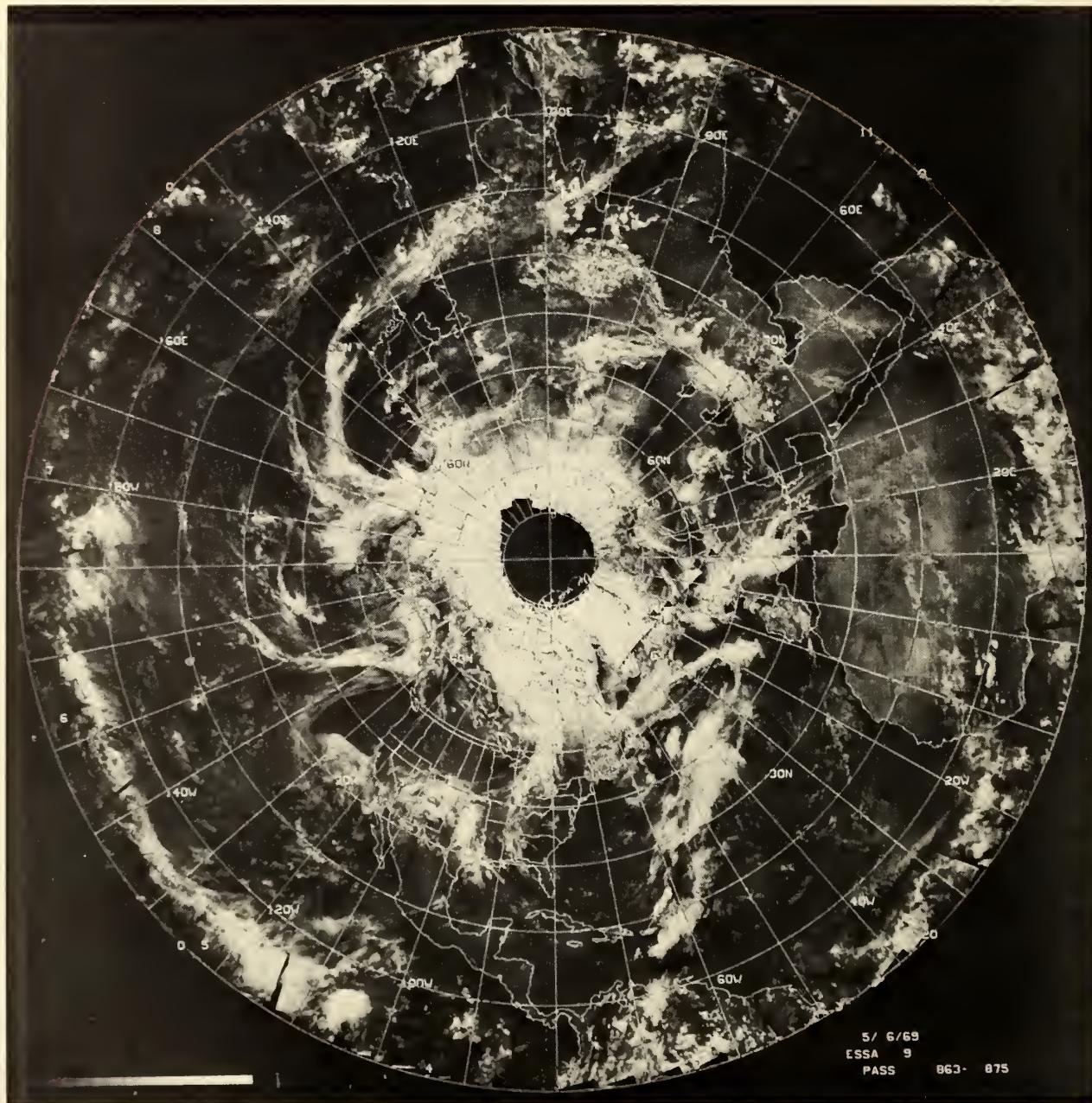


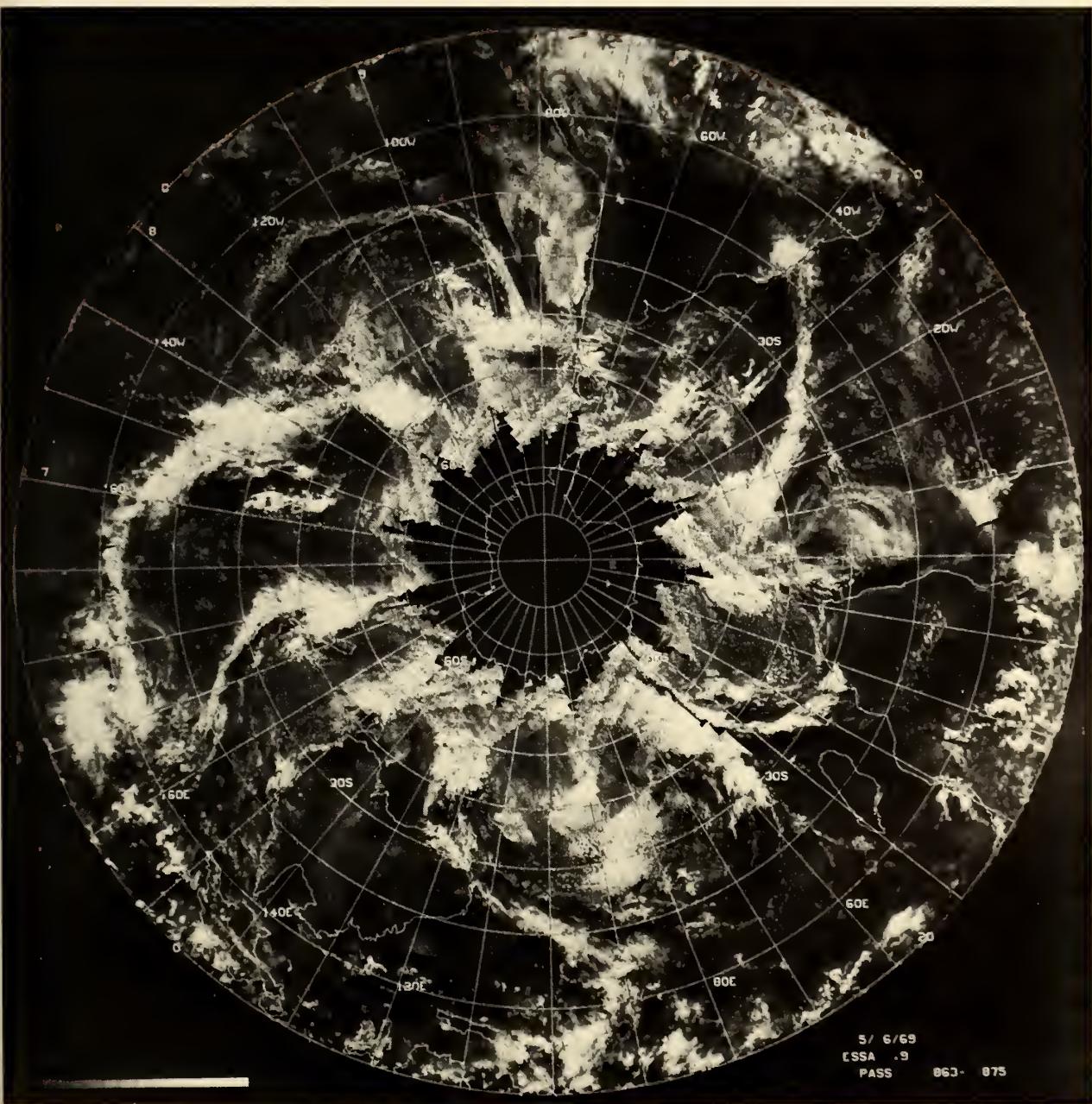


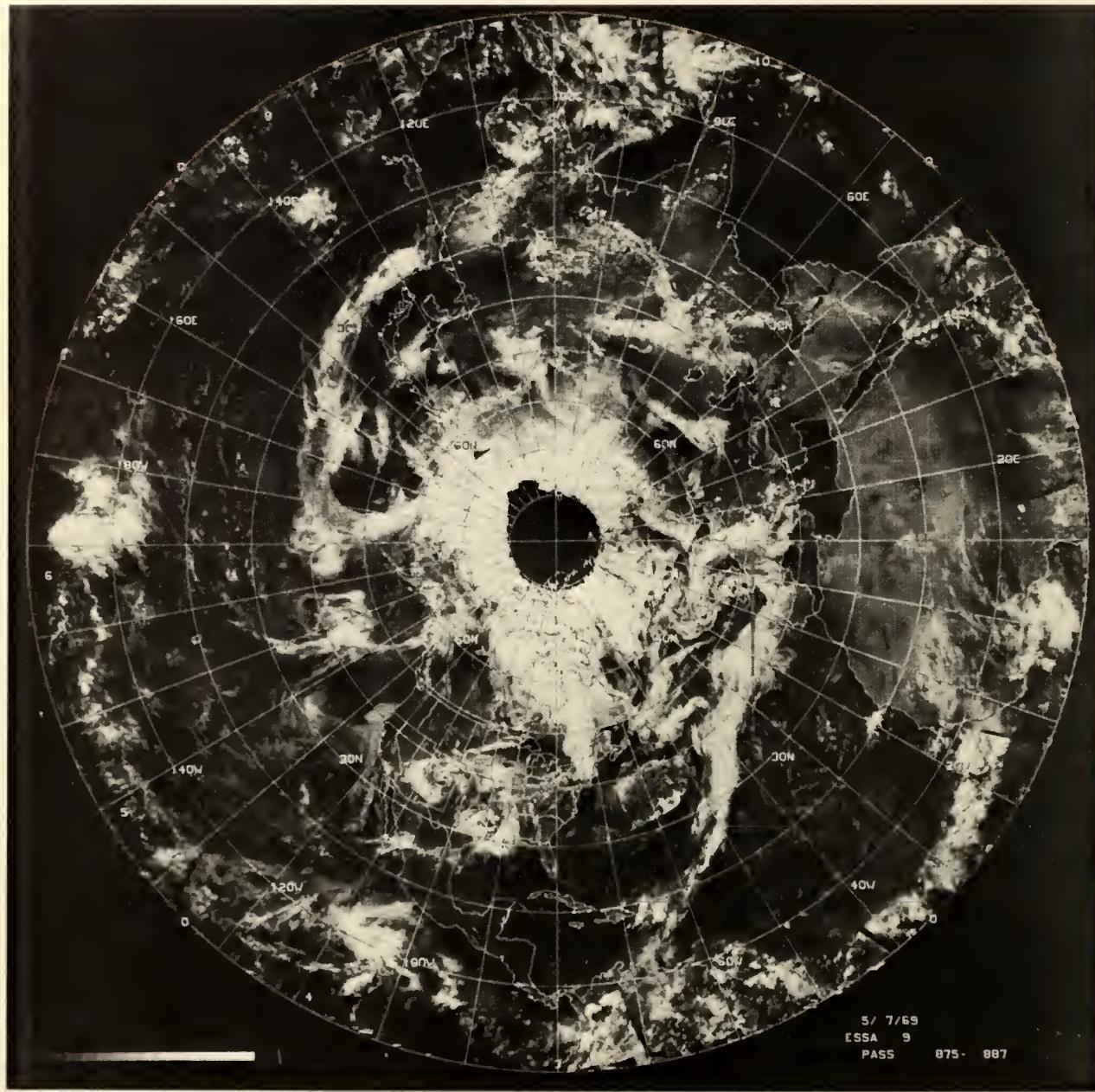


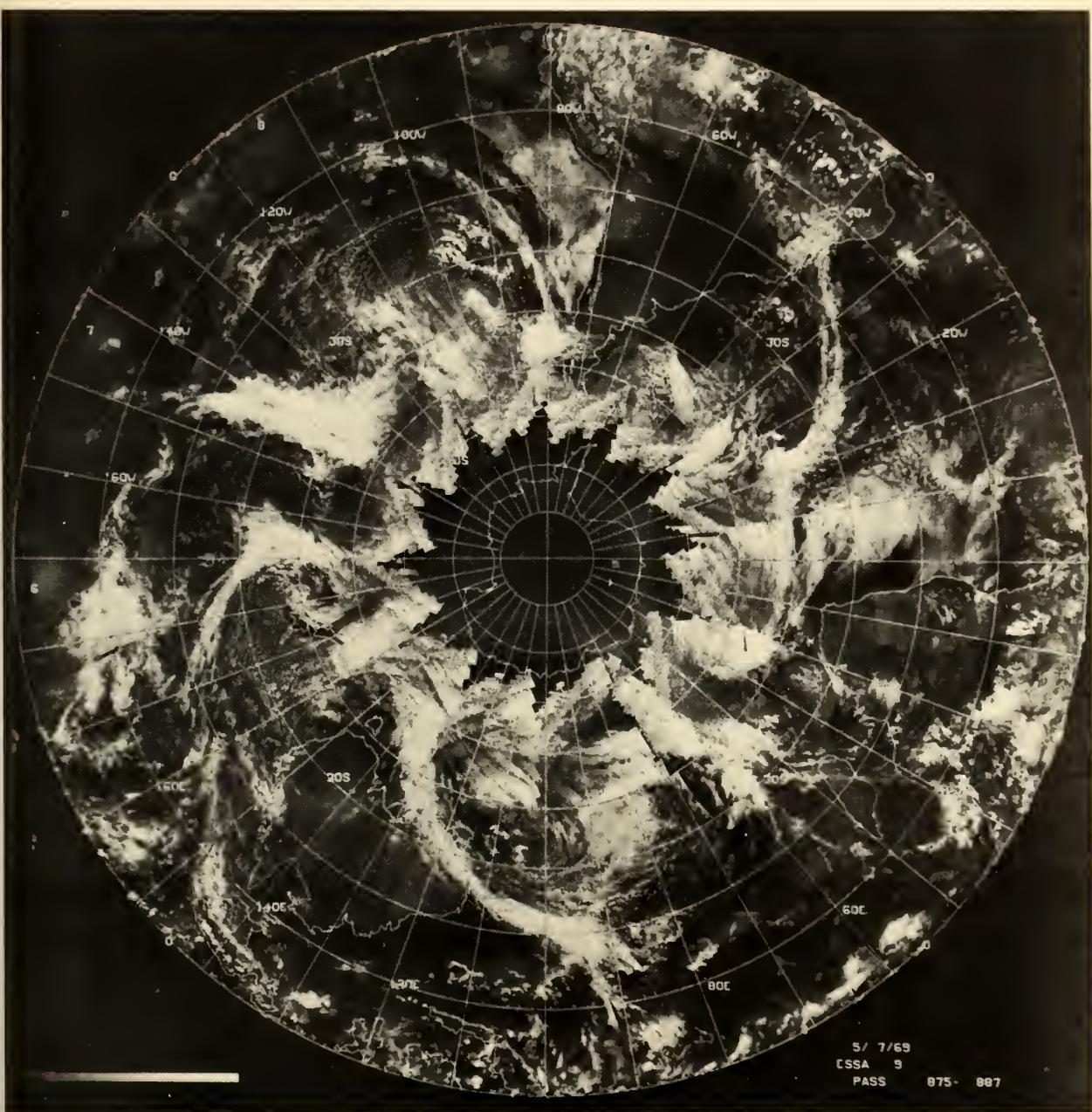


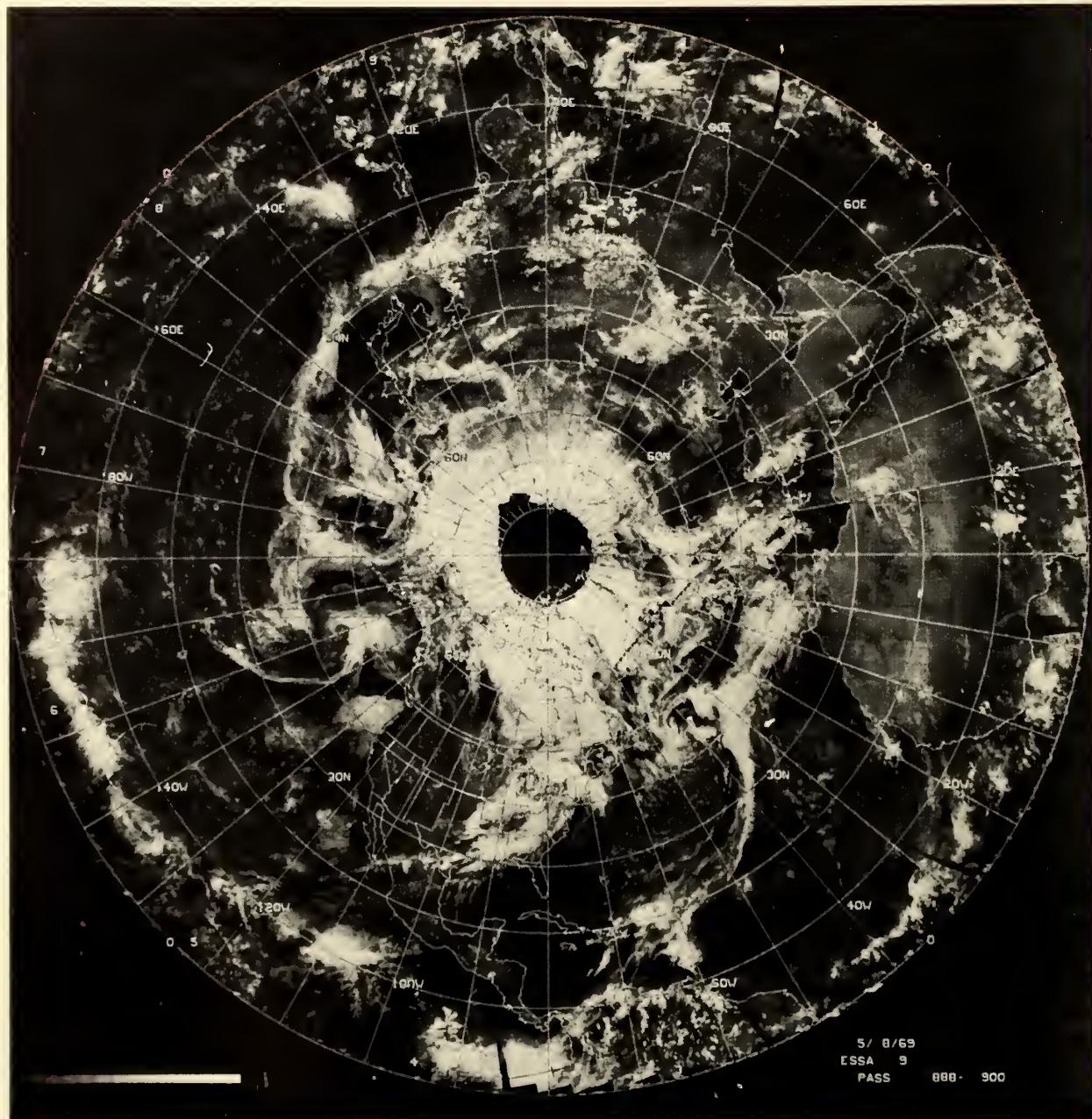


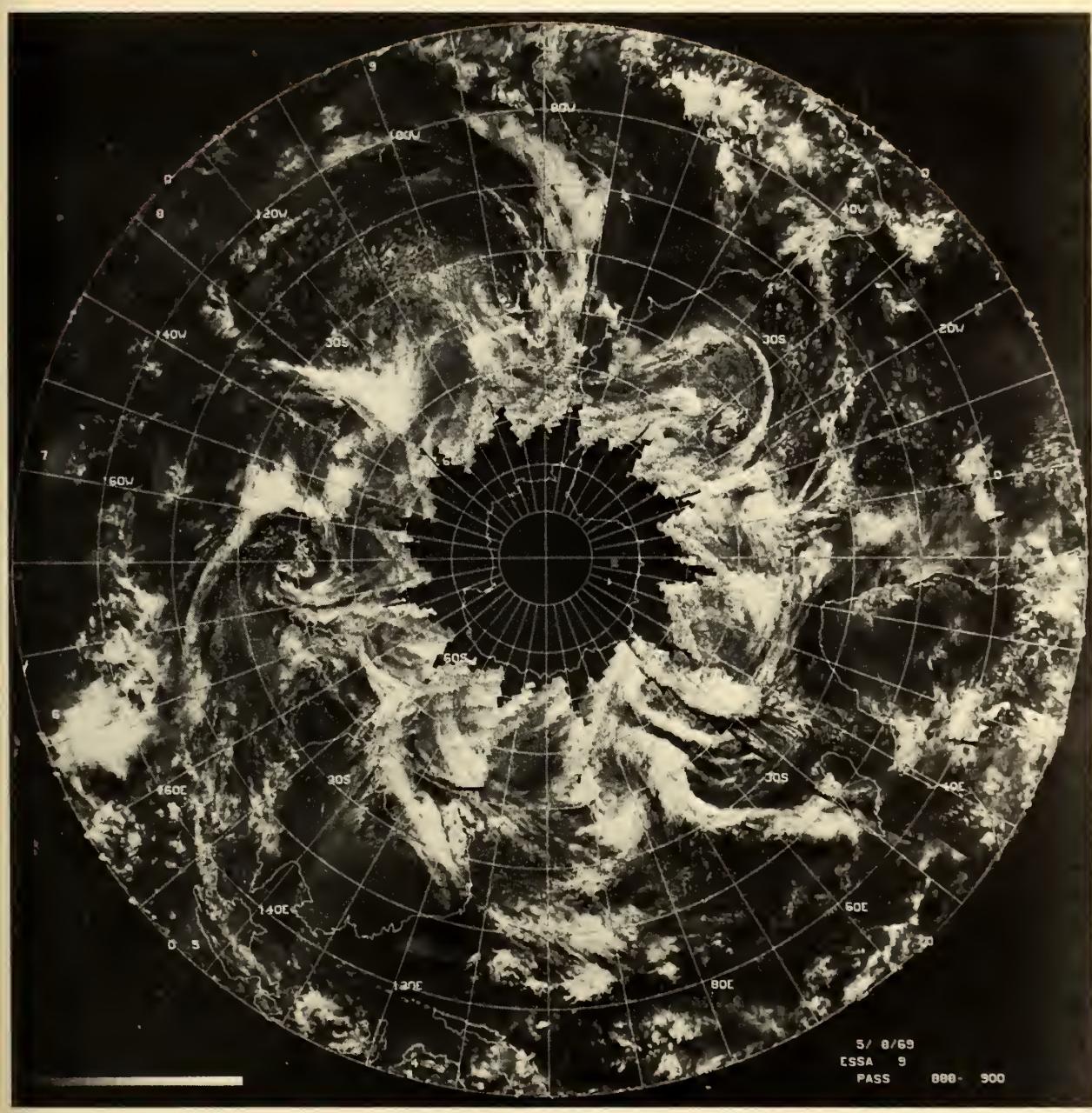


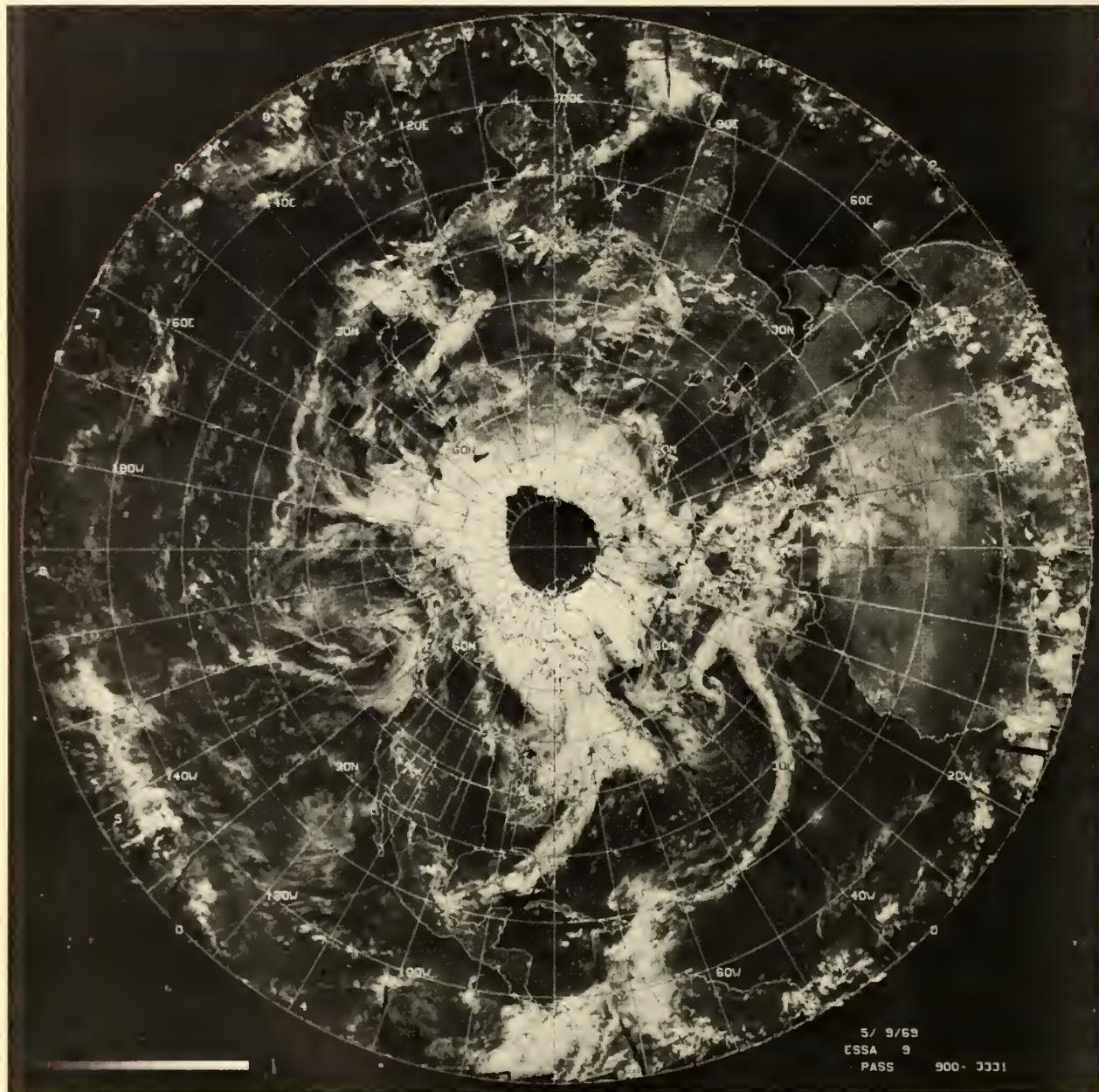


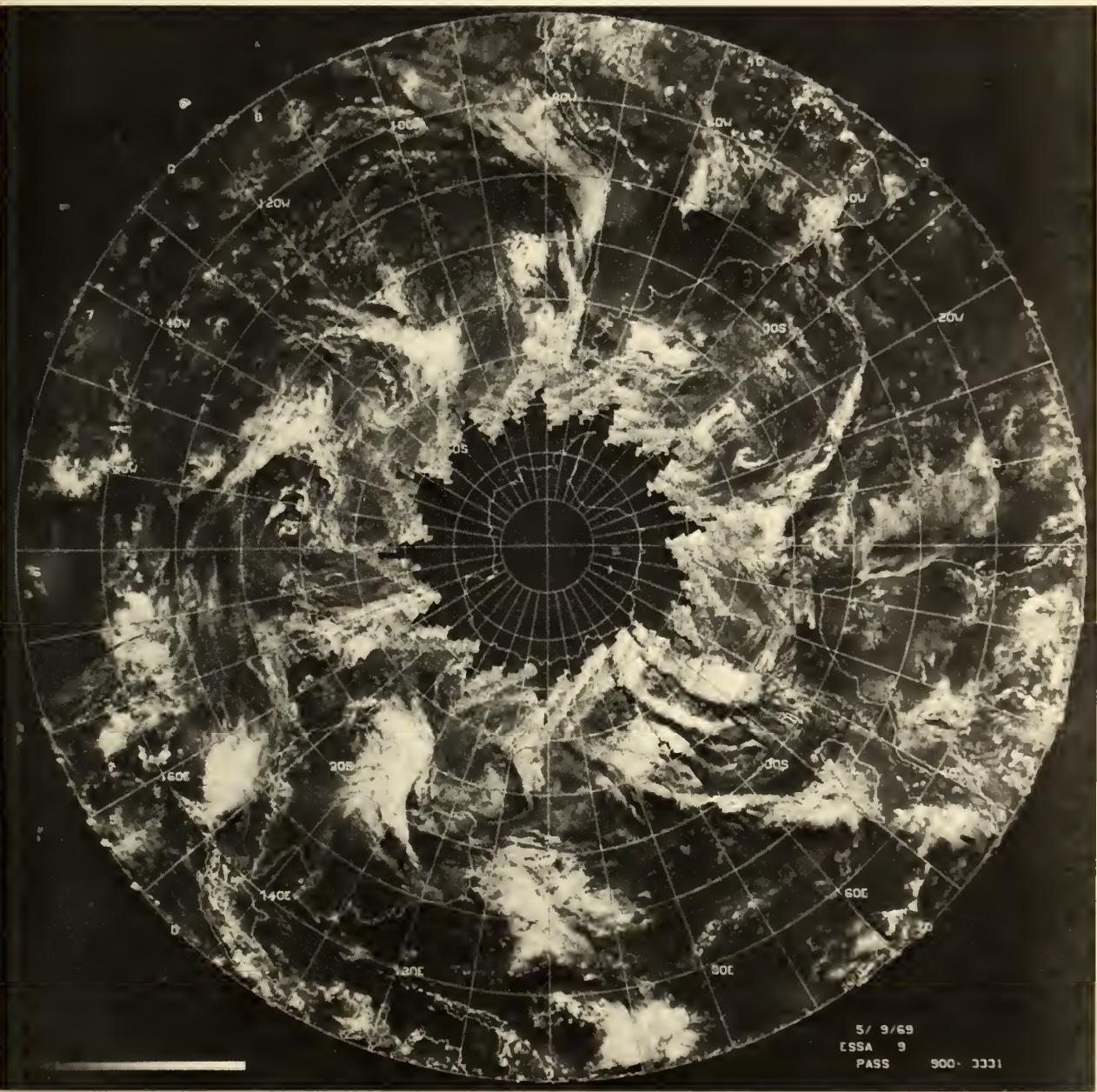


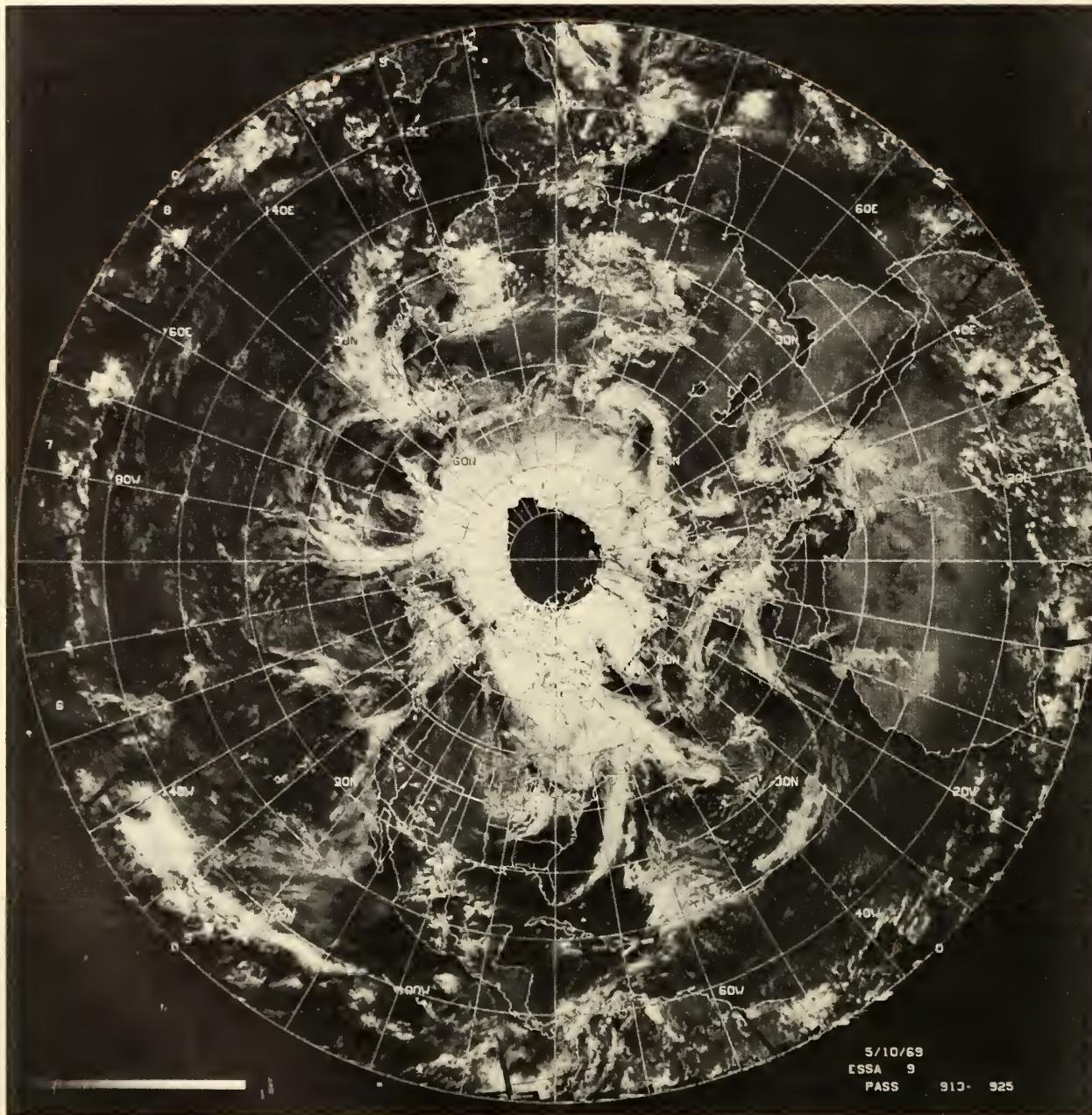


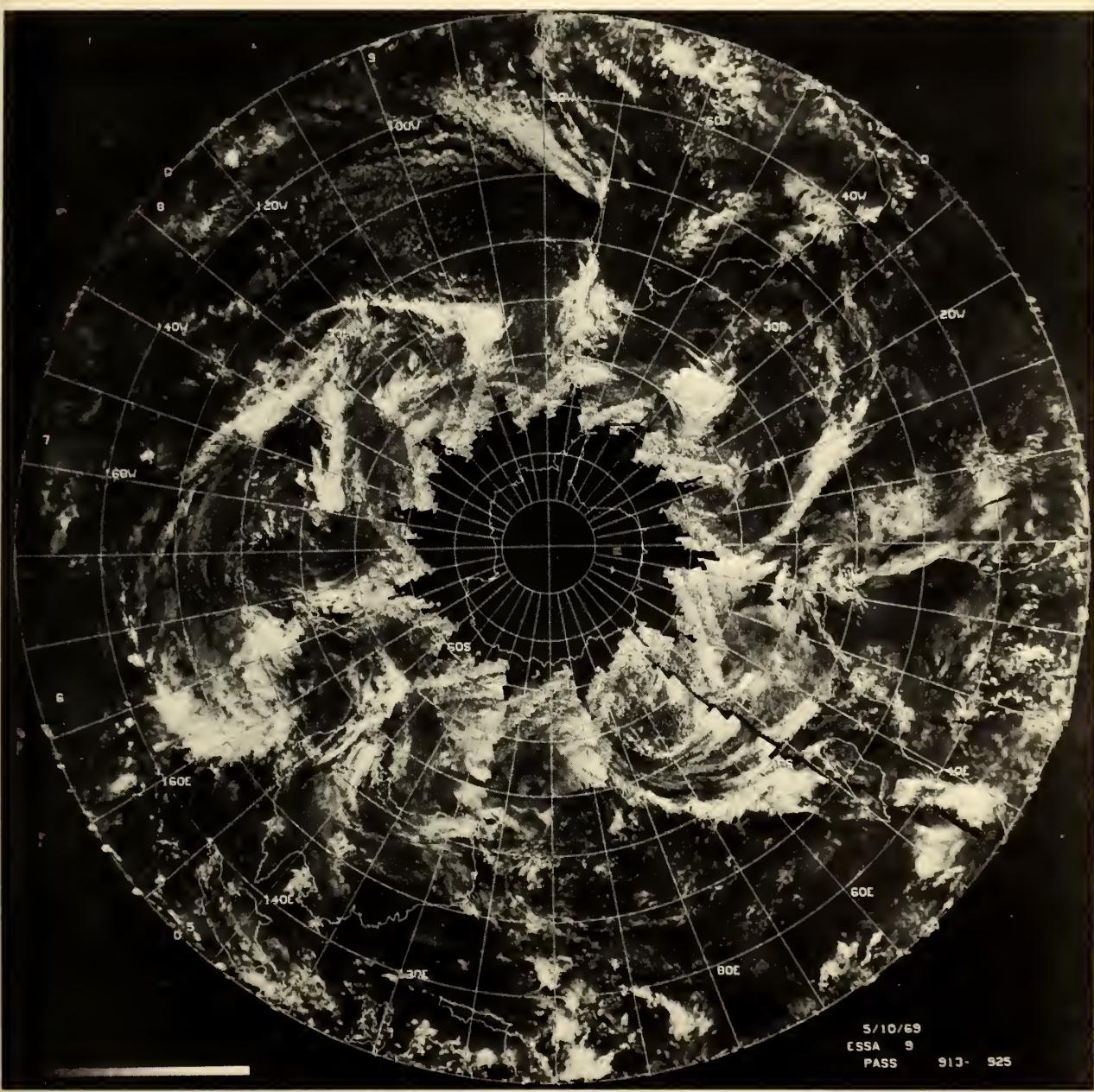




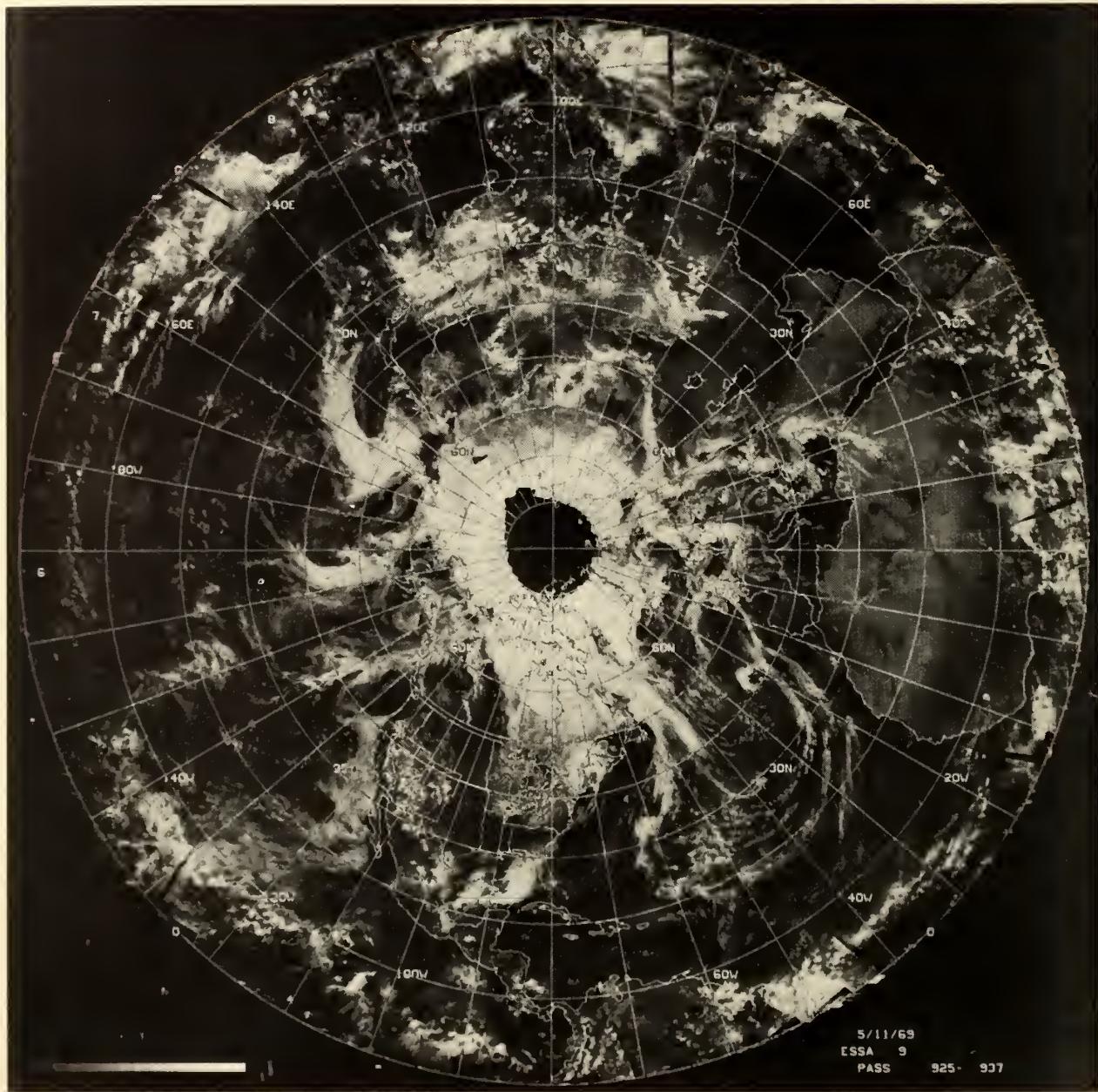


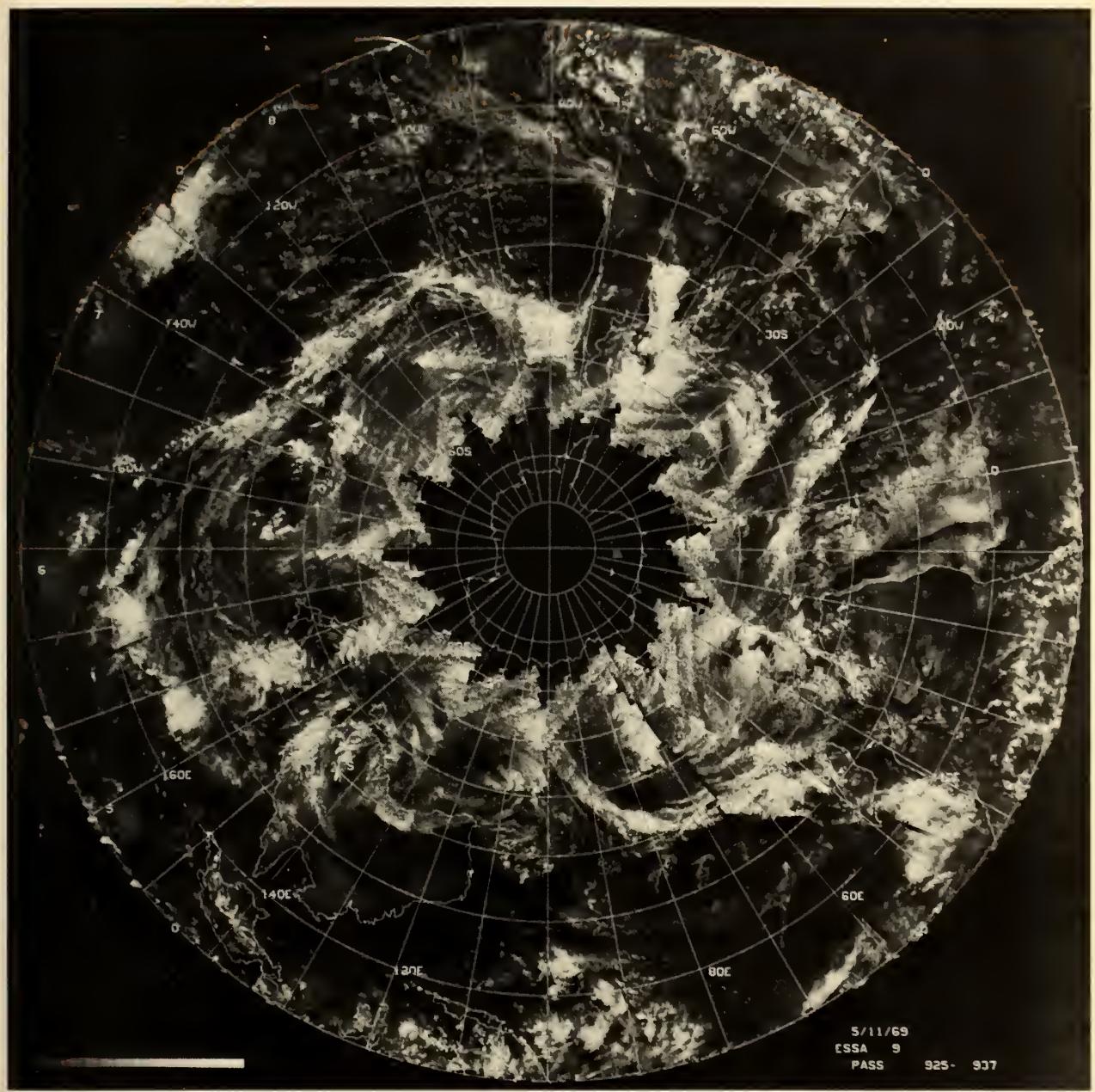




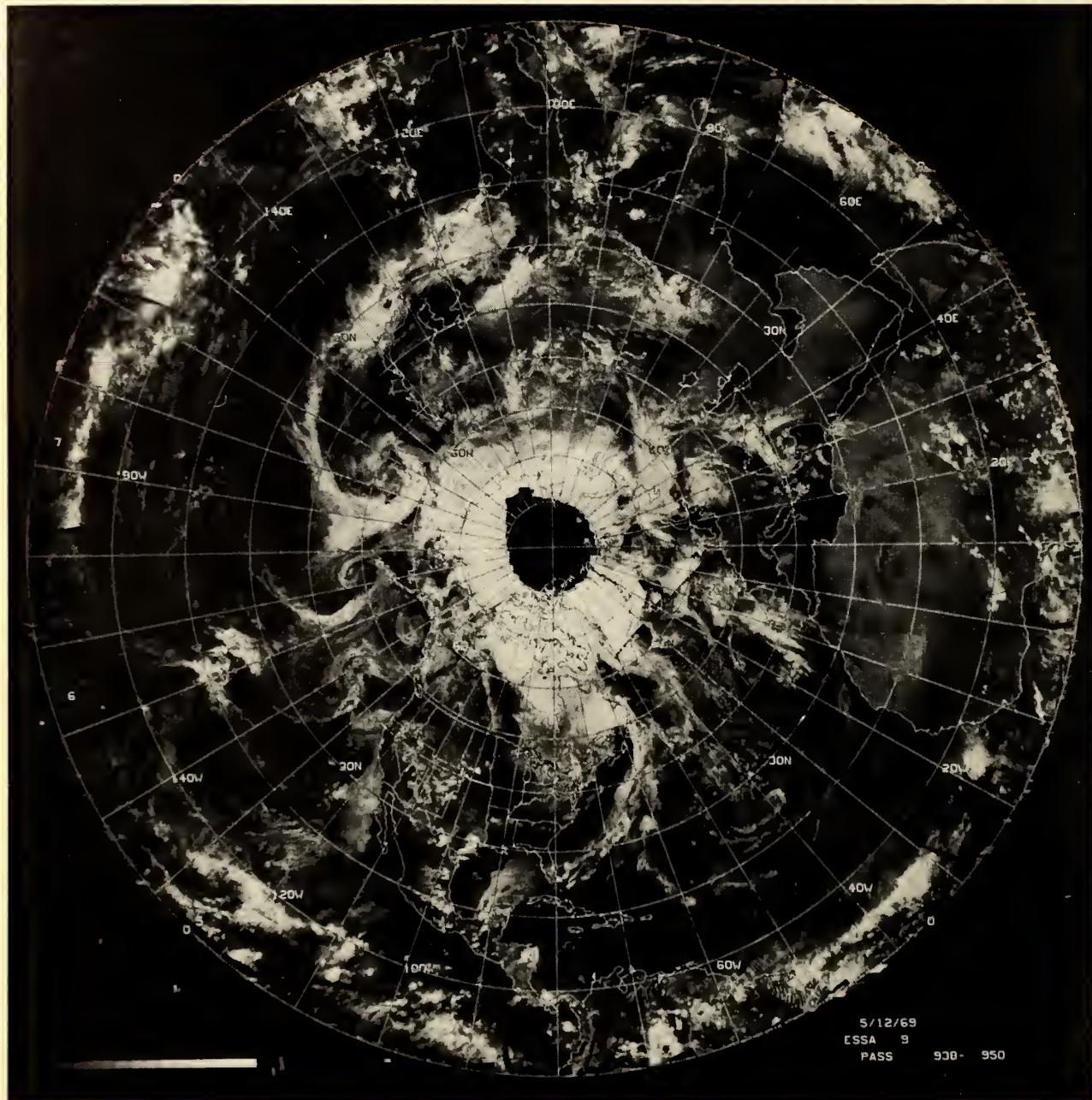


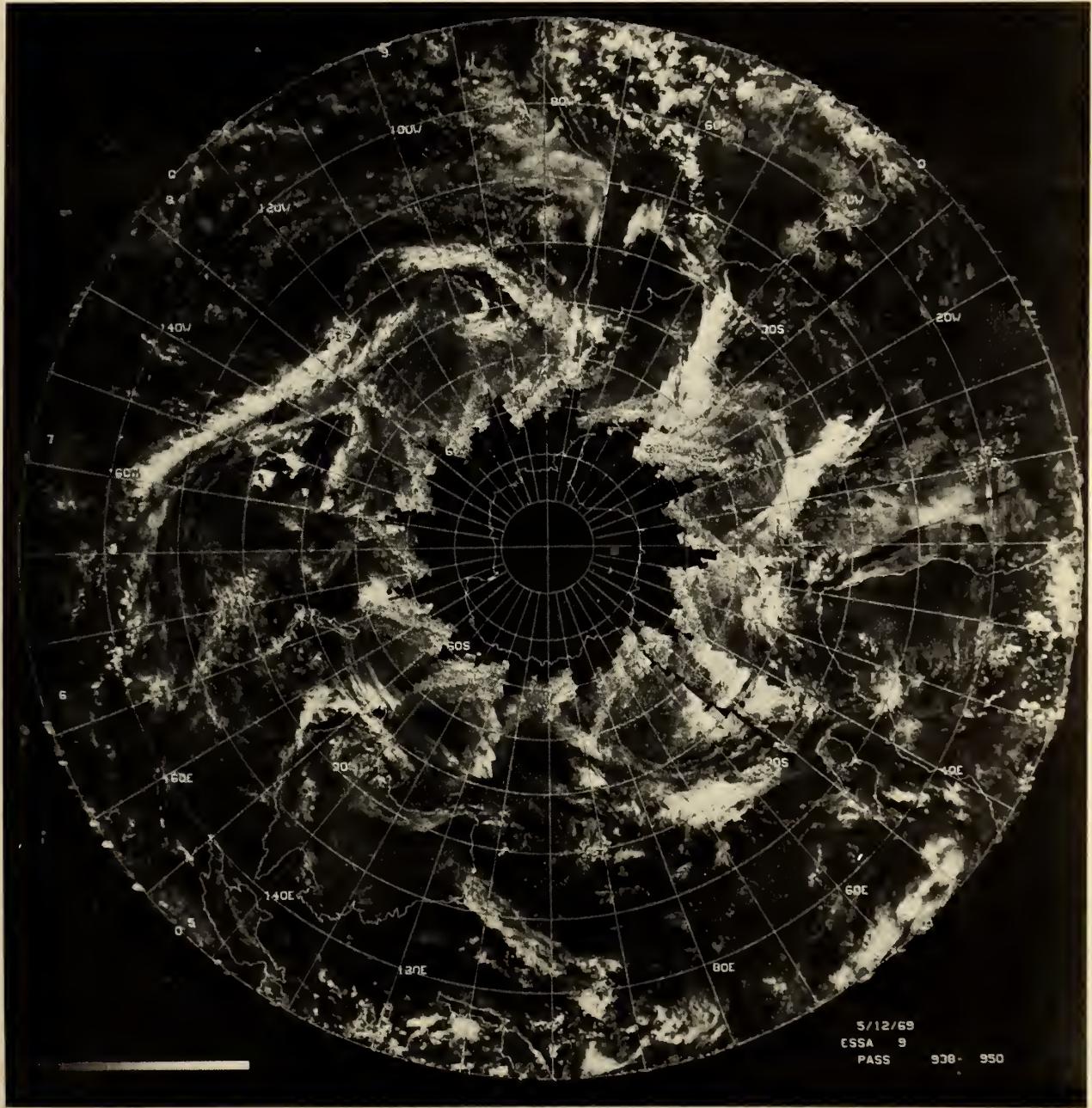
5/10/69
ESSA 9
PASS 913- 925

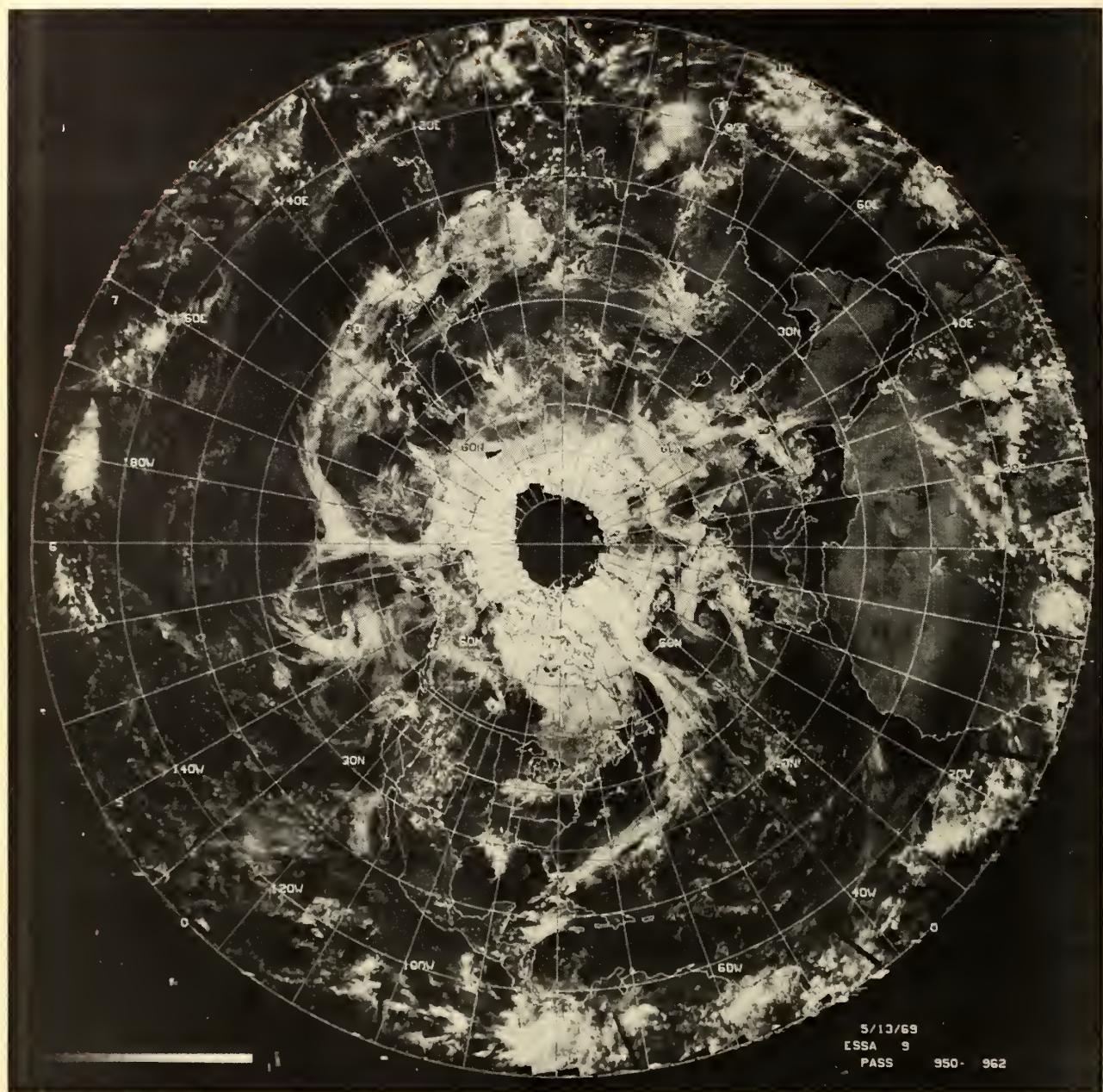


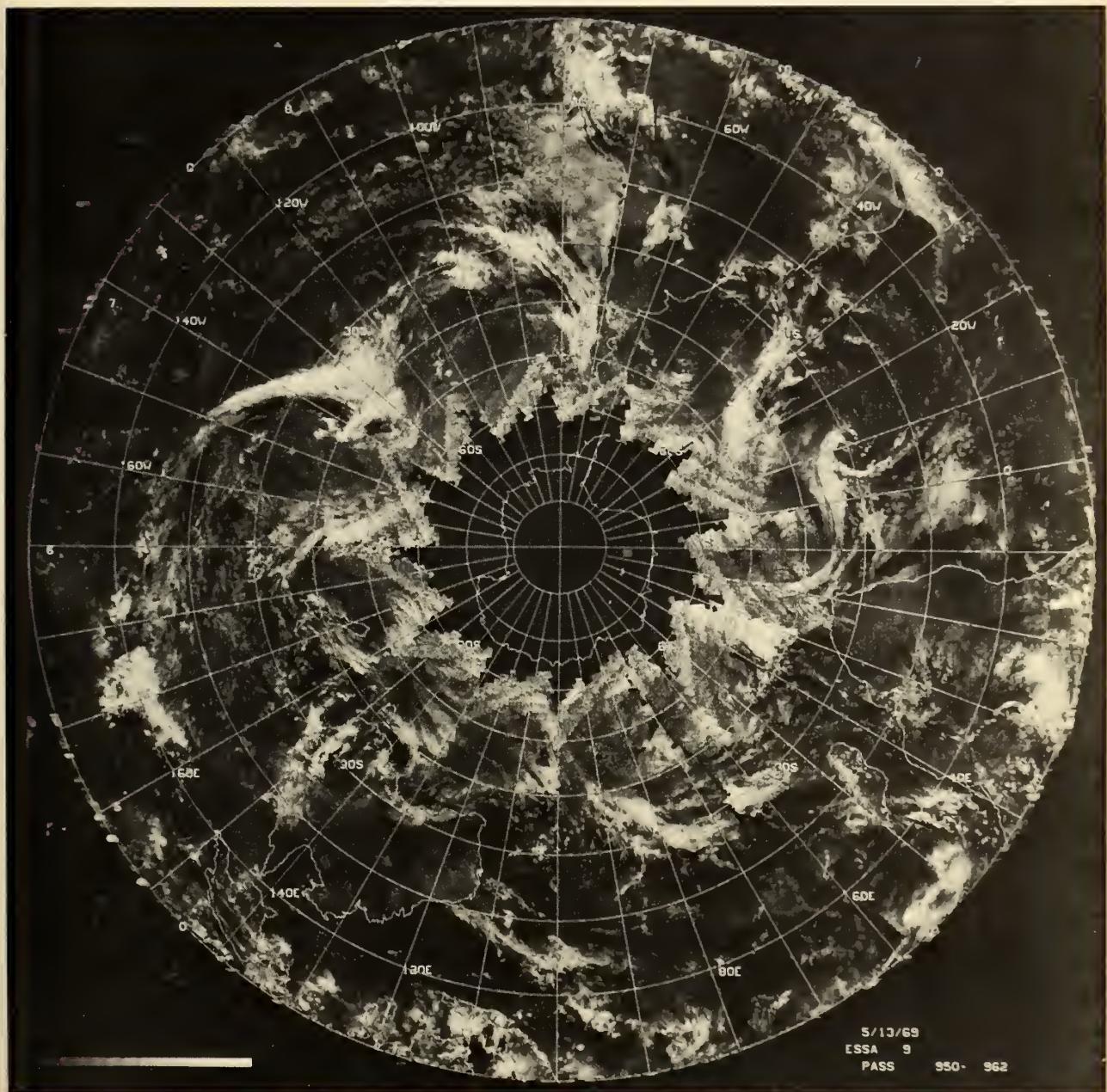


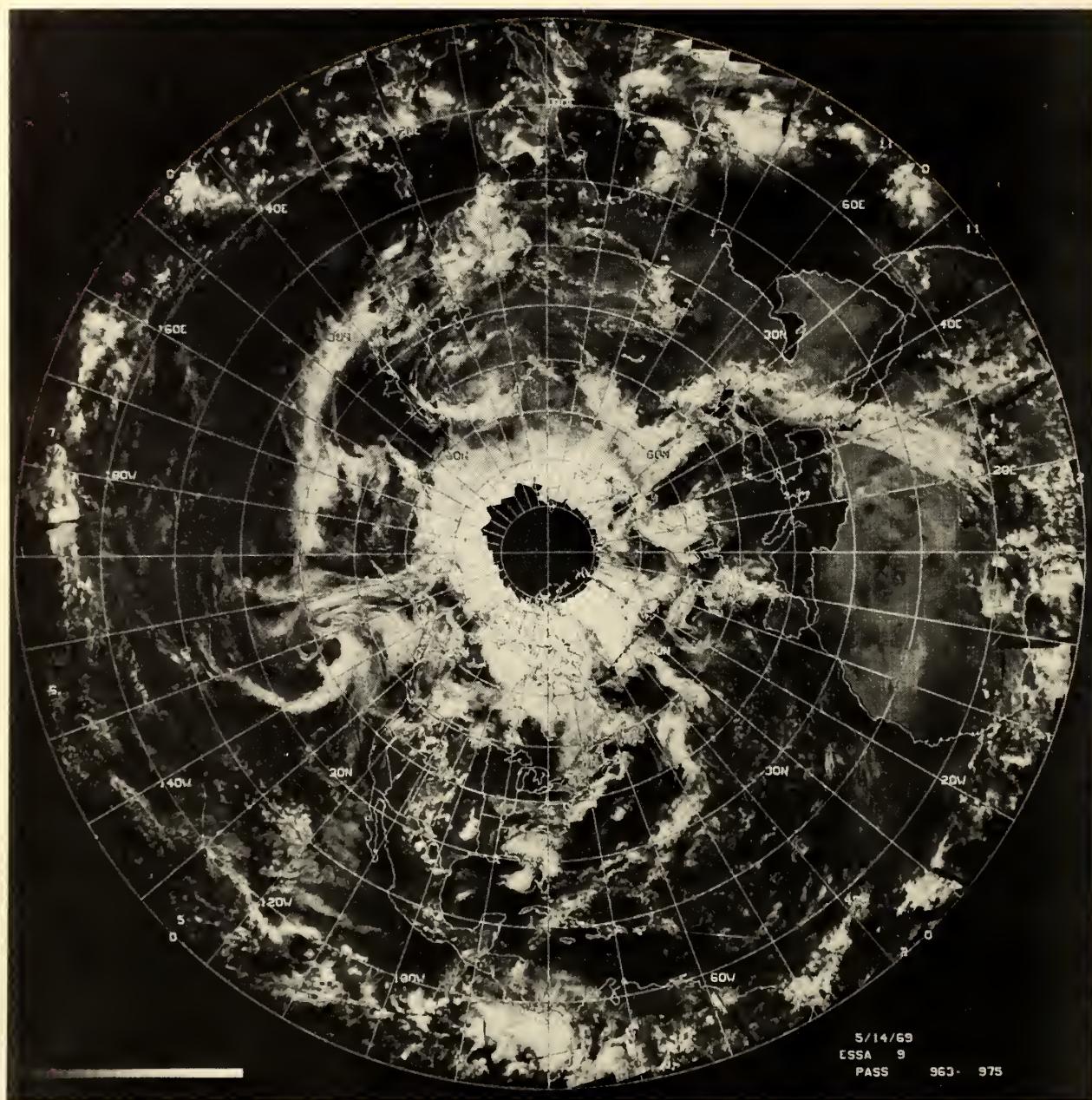
5/11/69
ESSA 9
PASS 925- 937

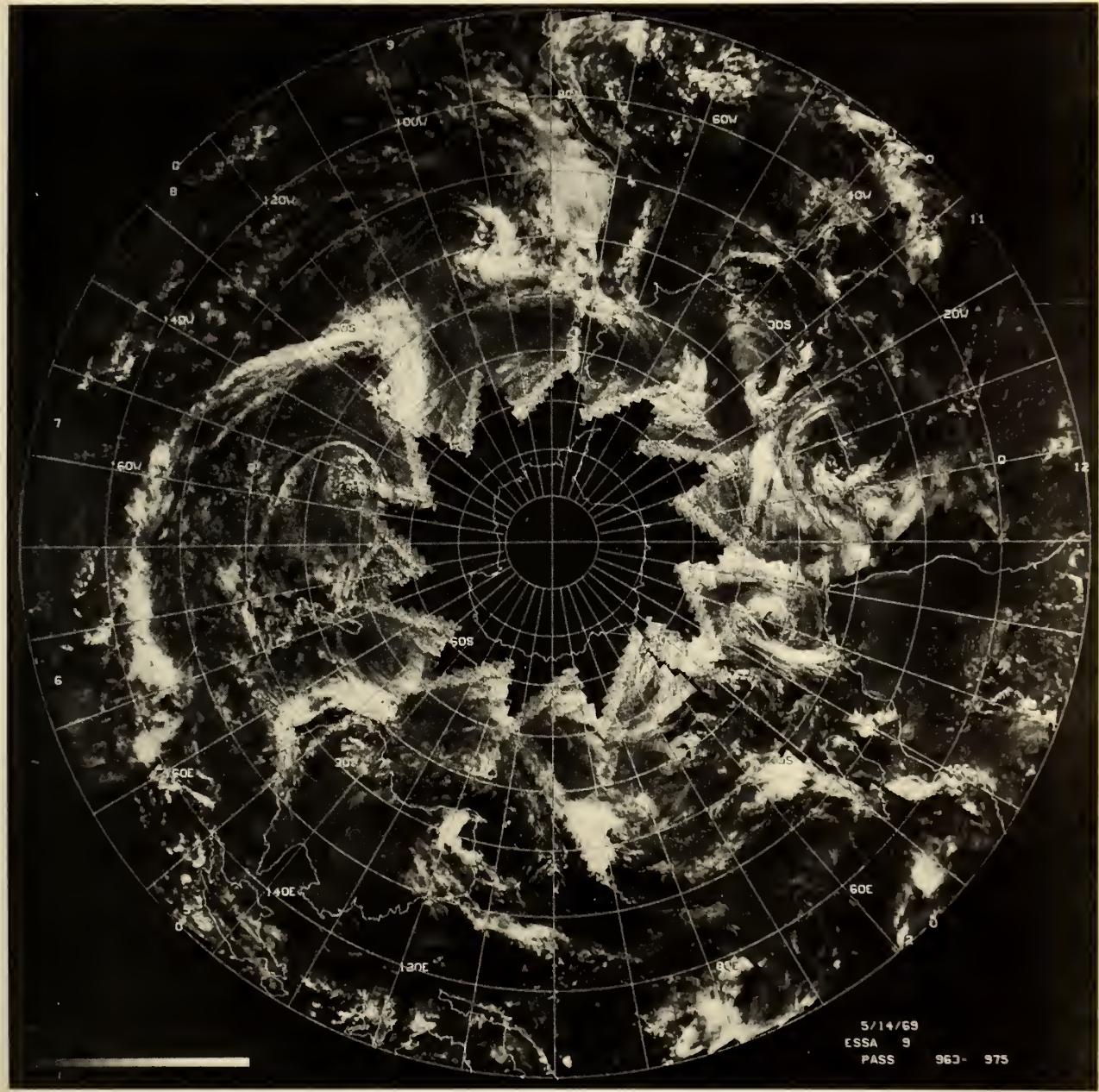


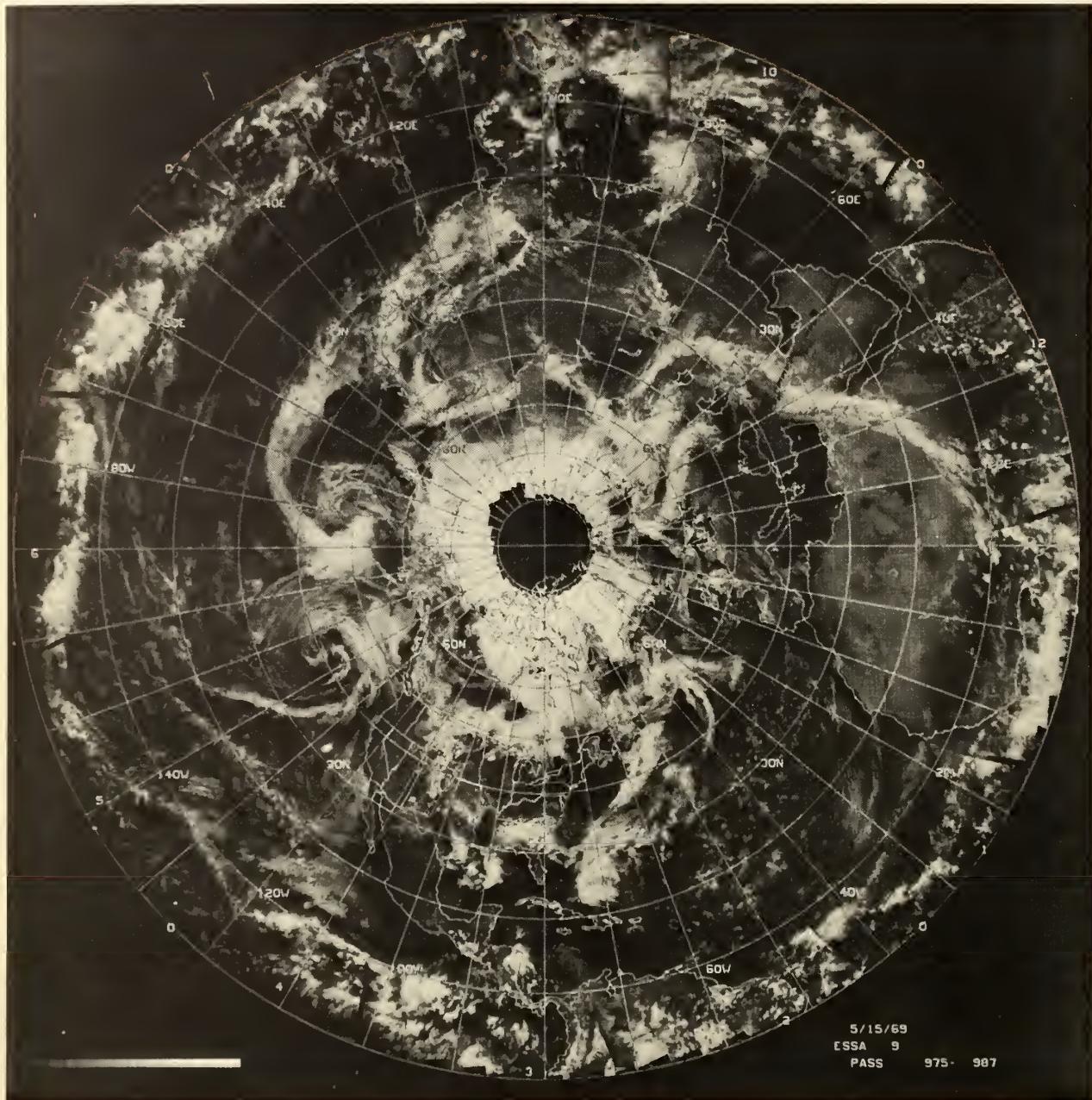


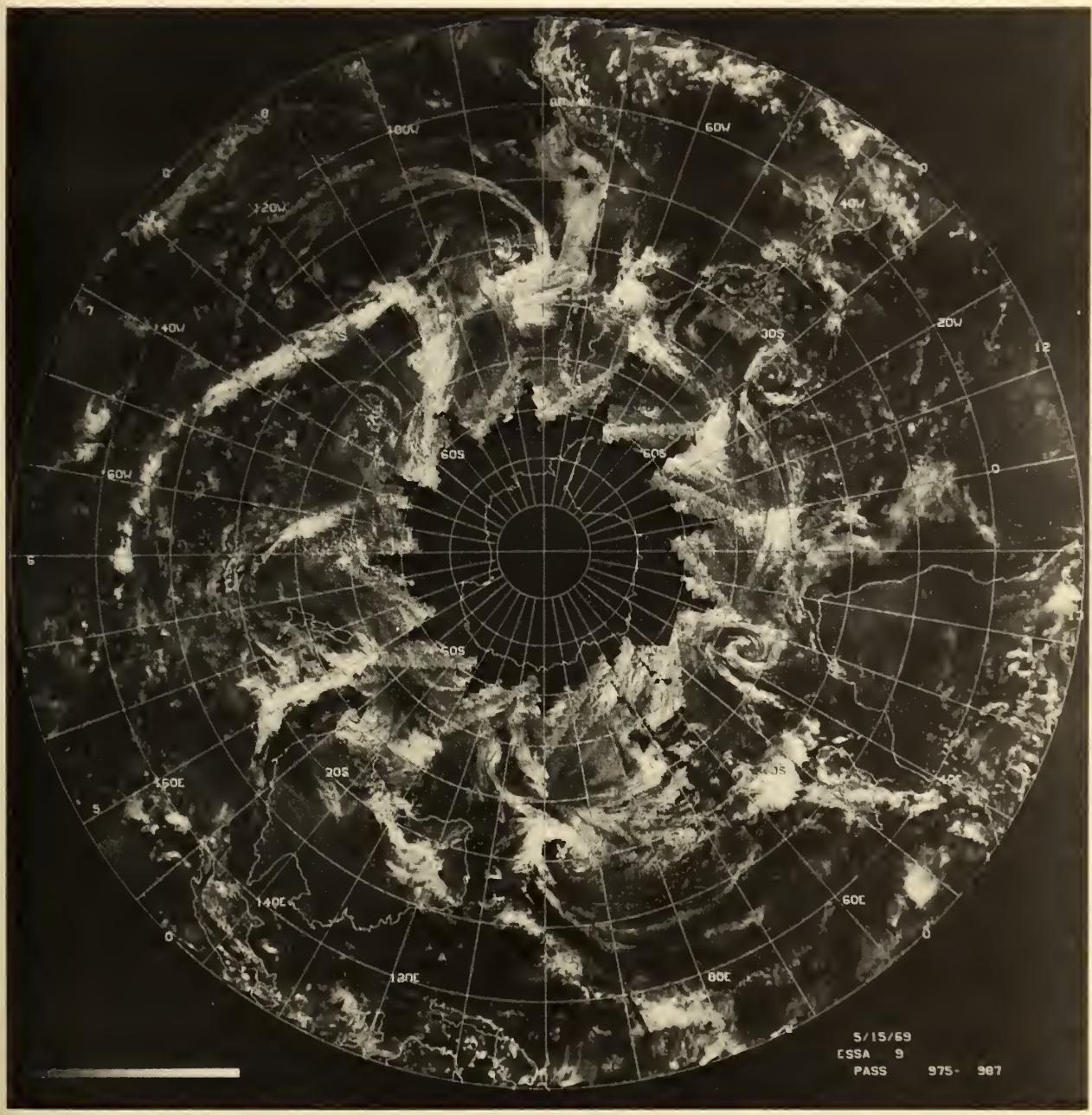


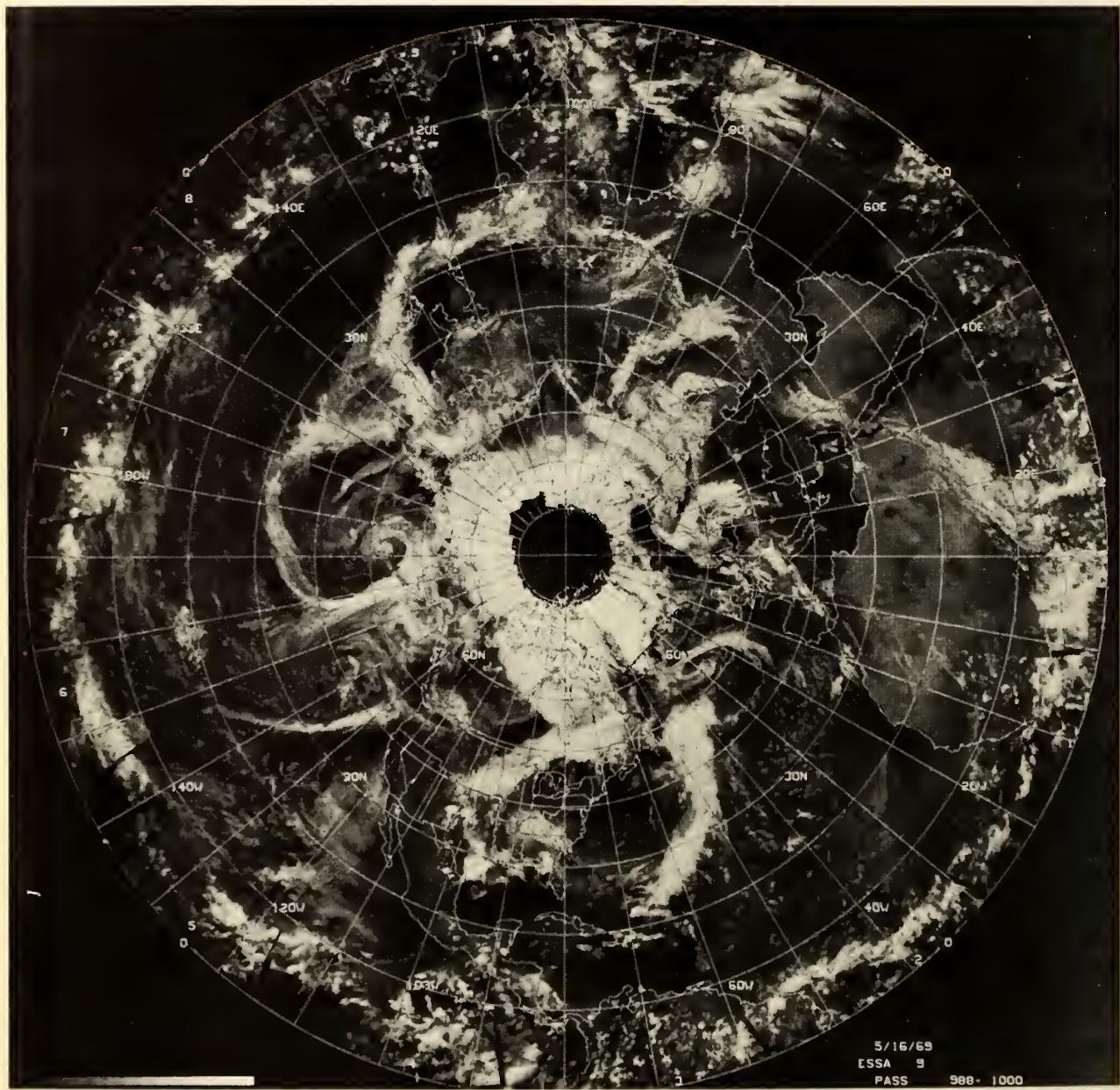


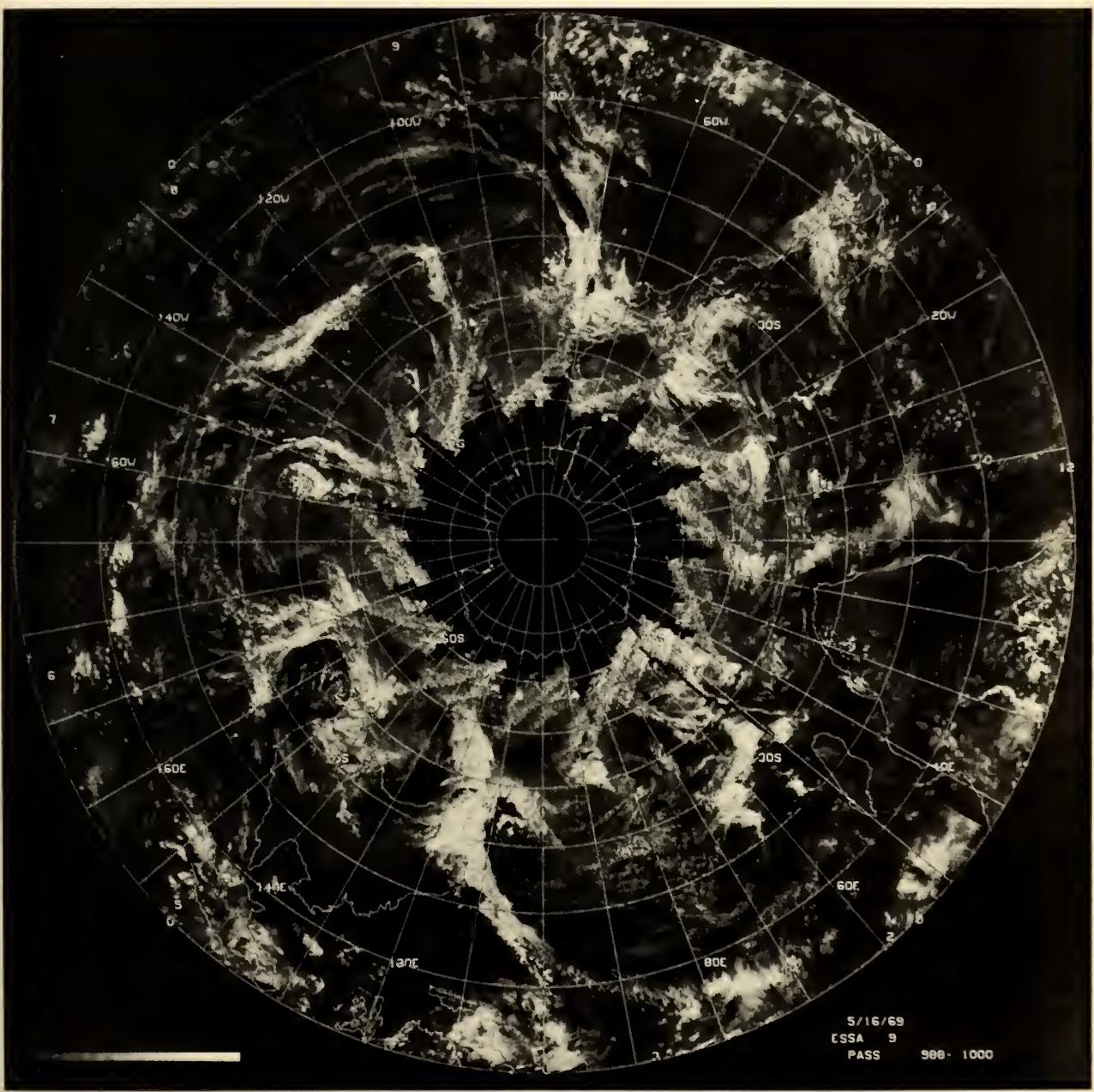


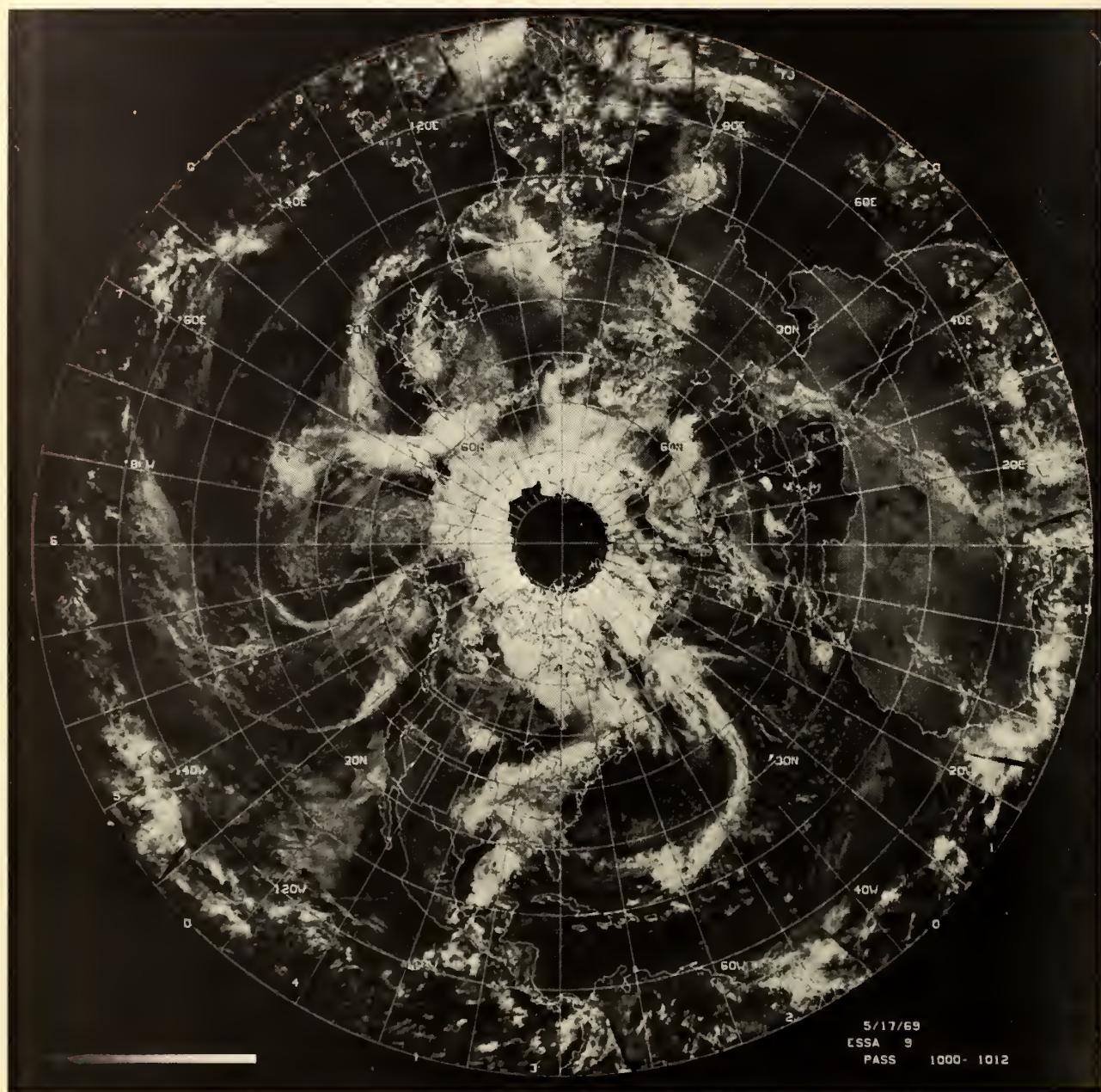




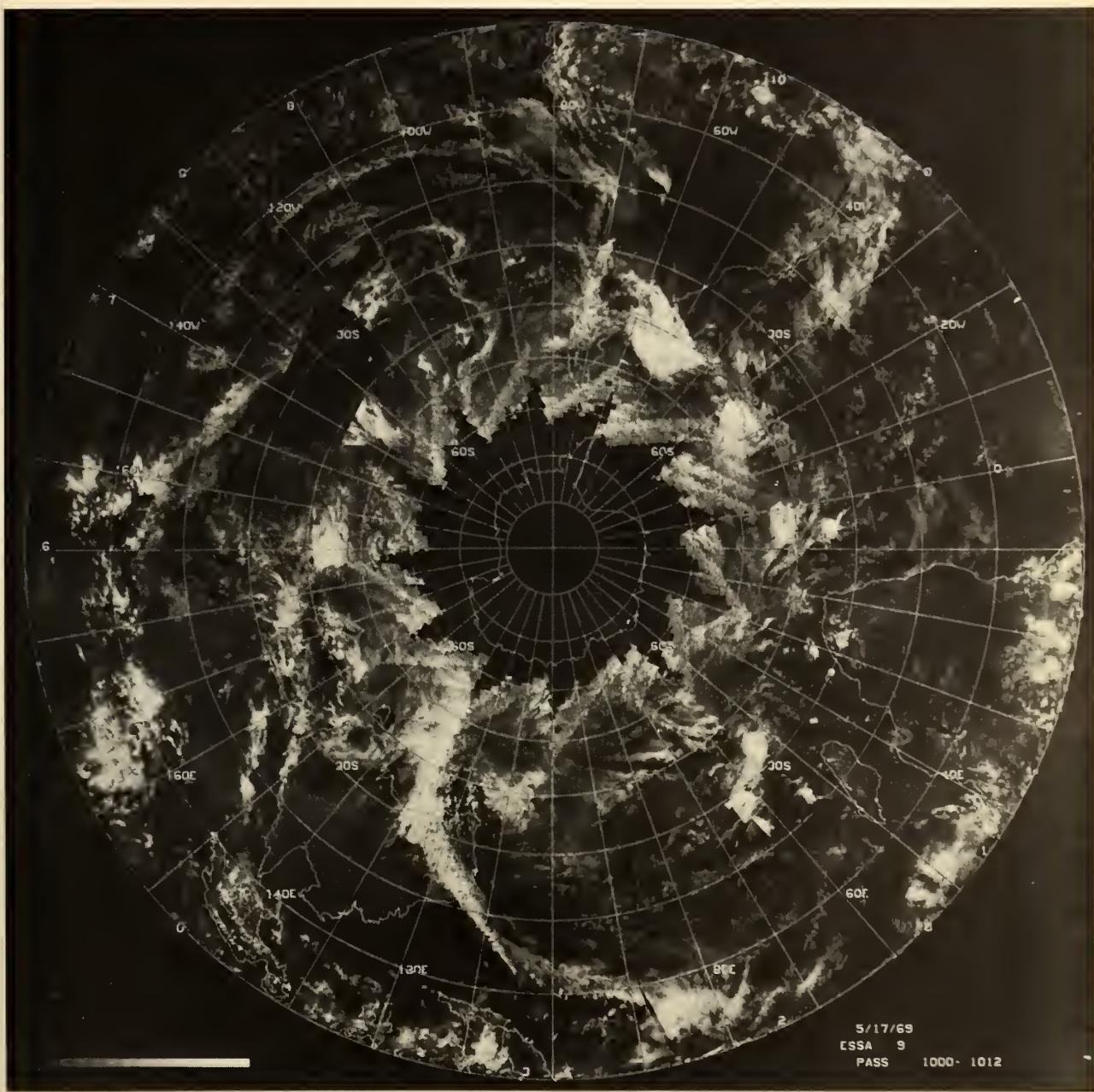


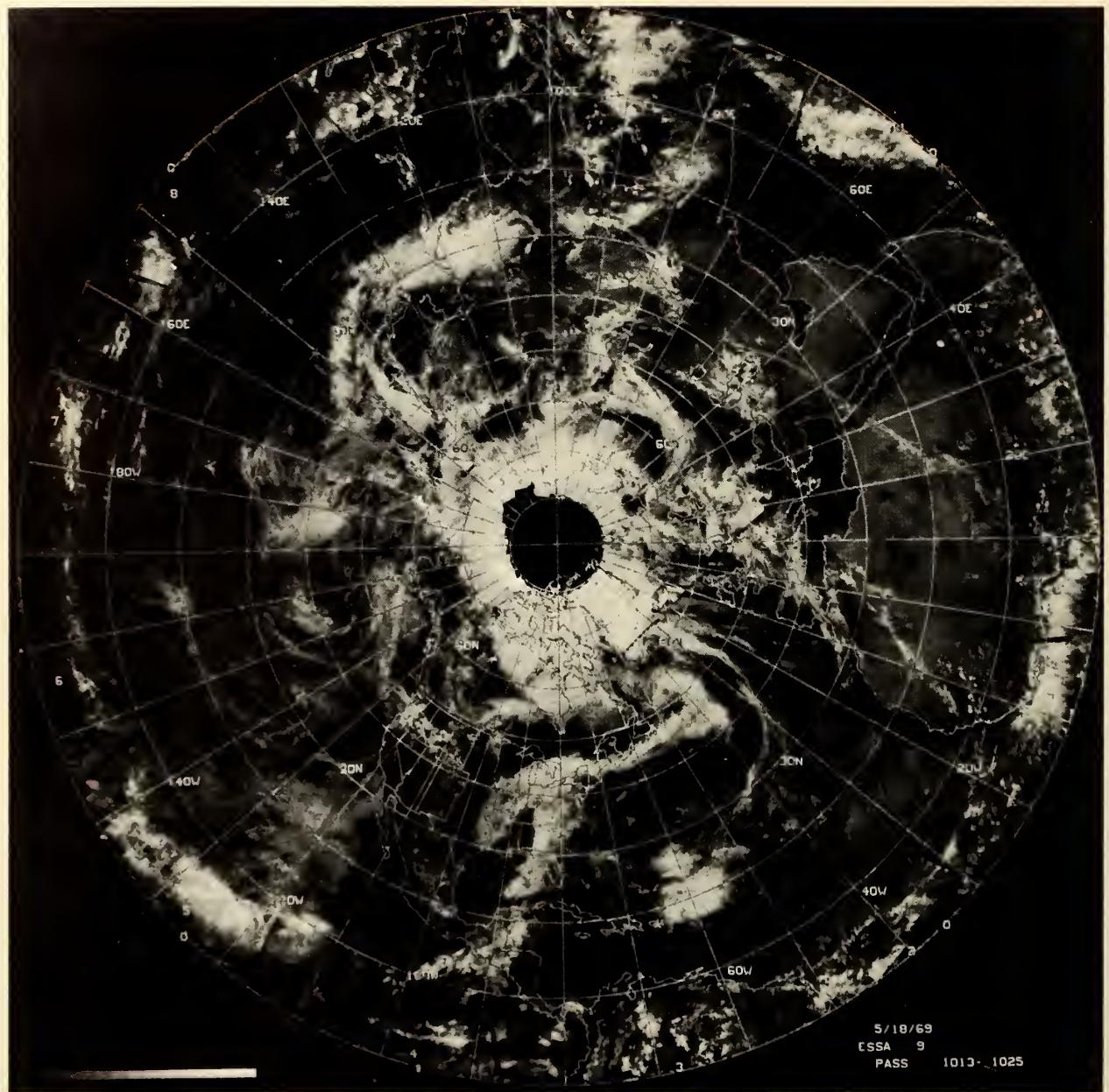


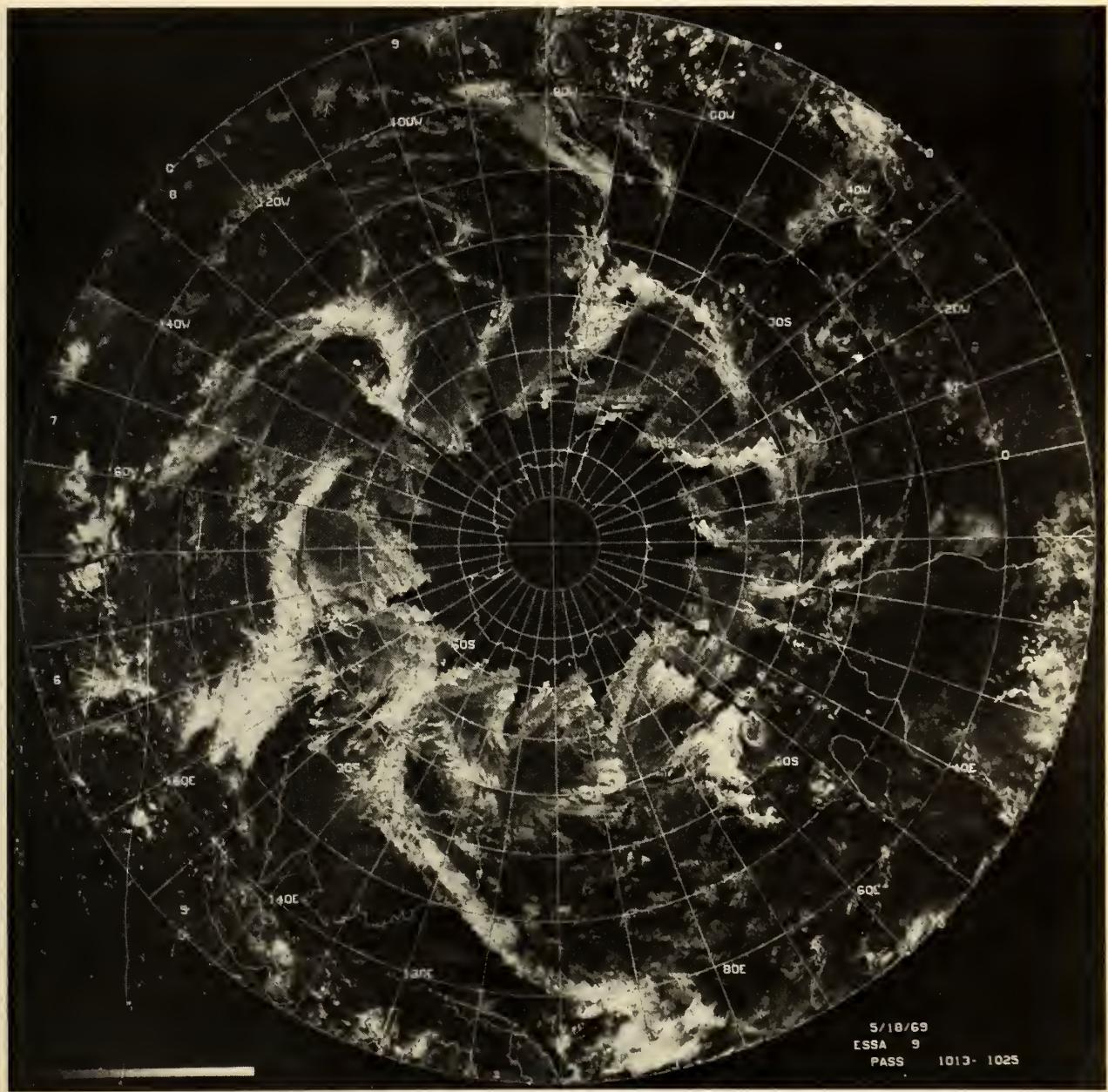


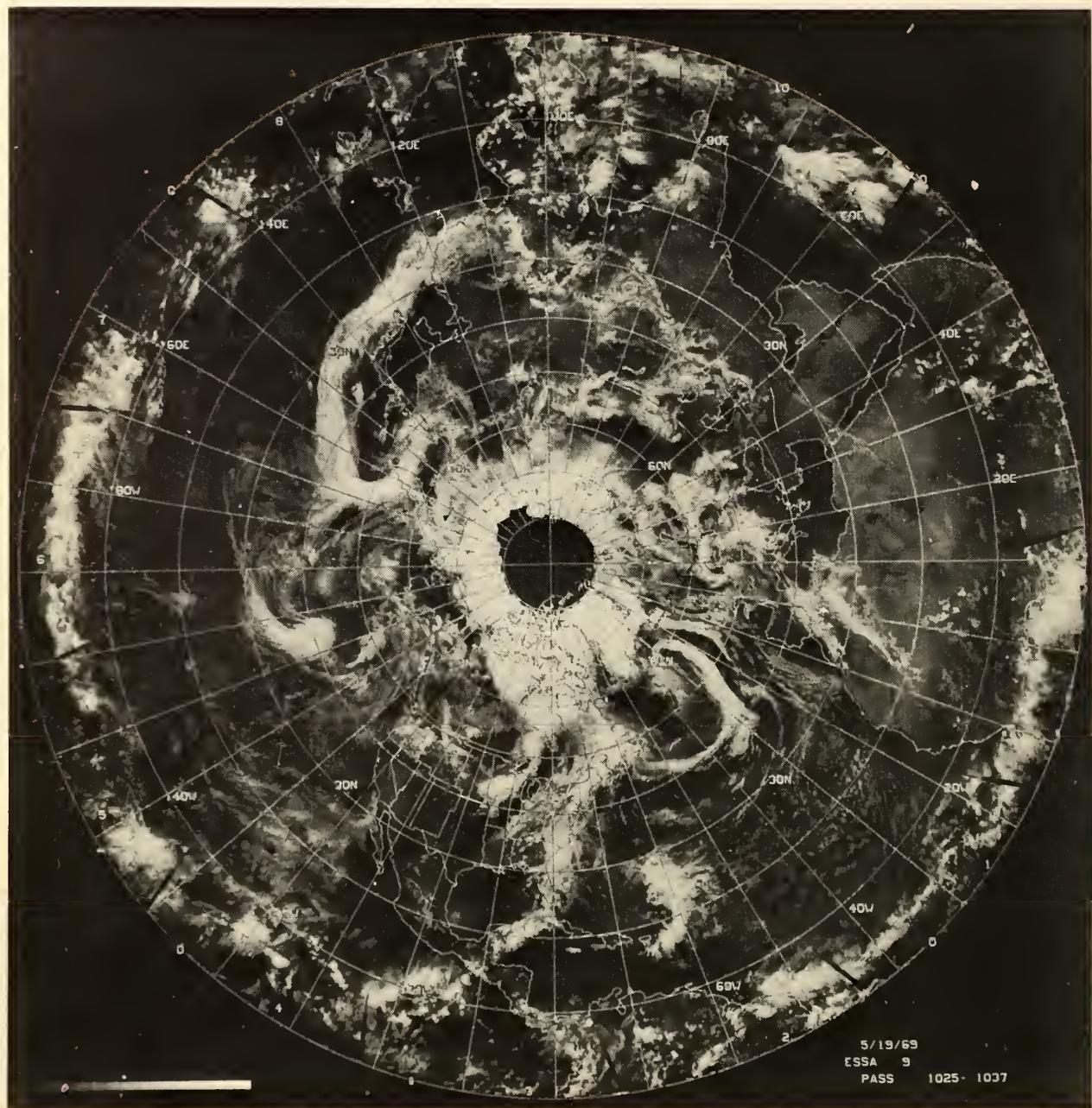


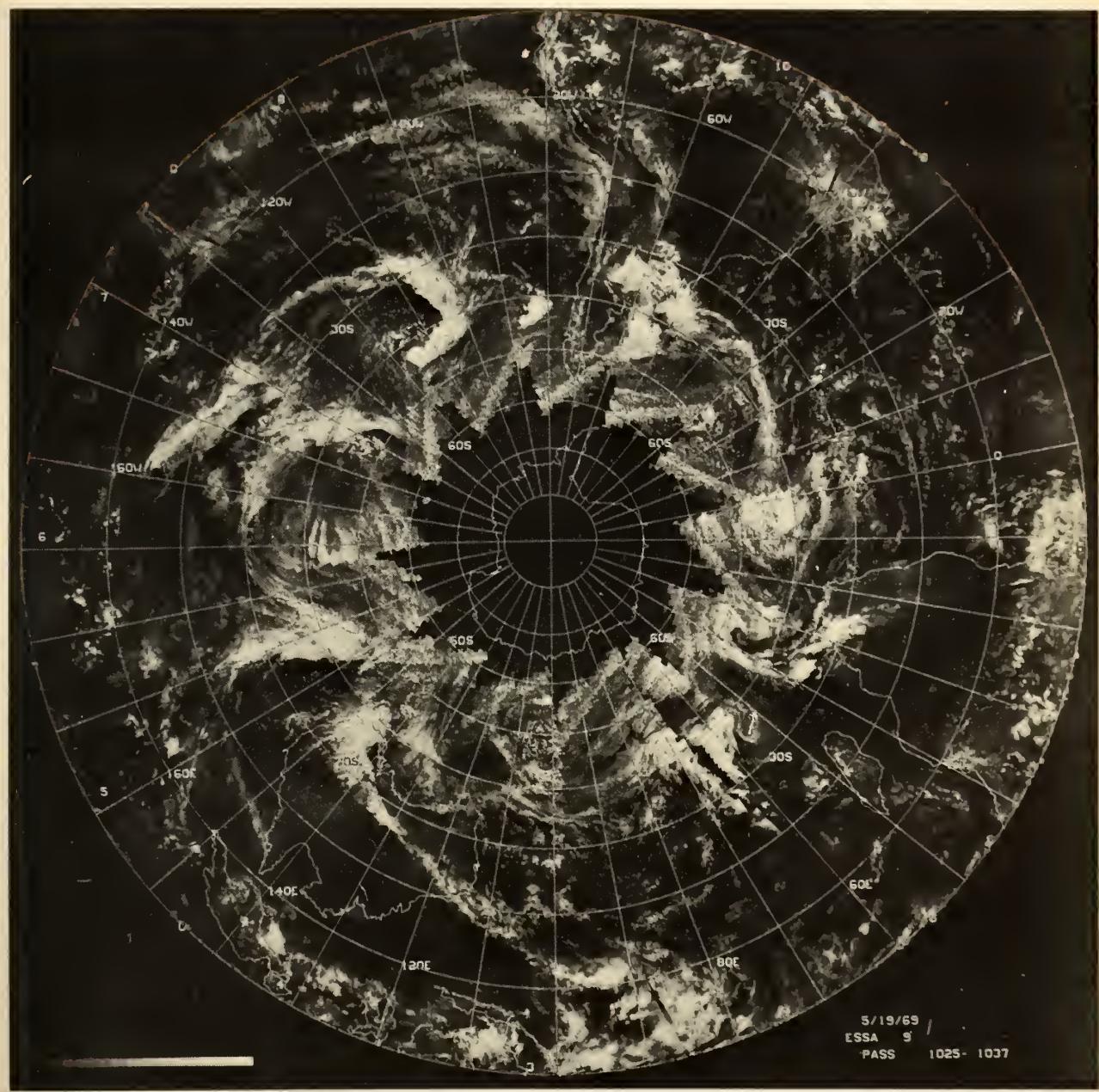
5/17/69
ESSA 9
PASS 1000-1012

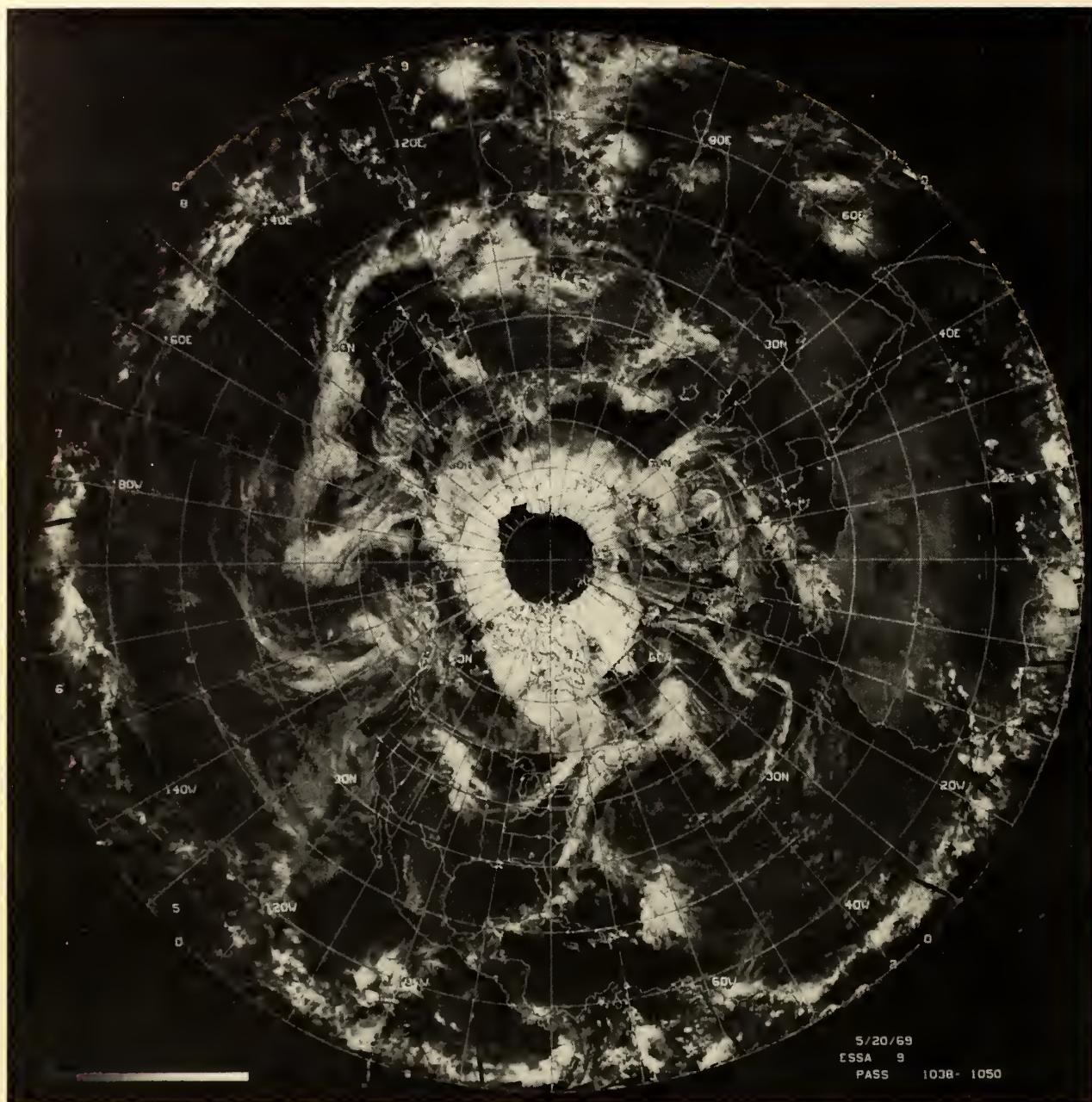


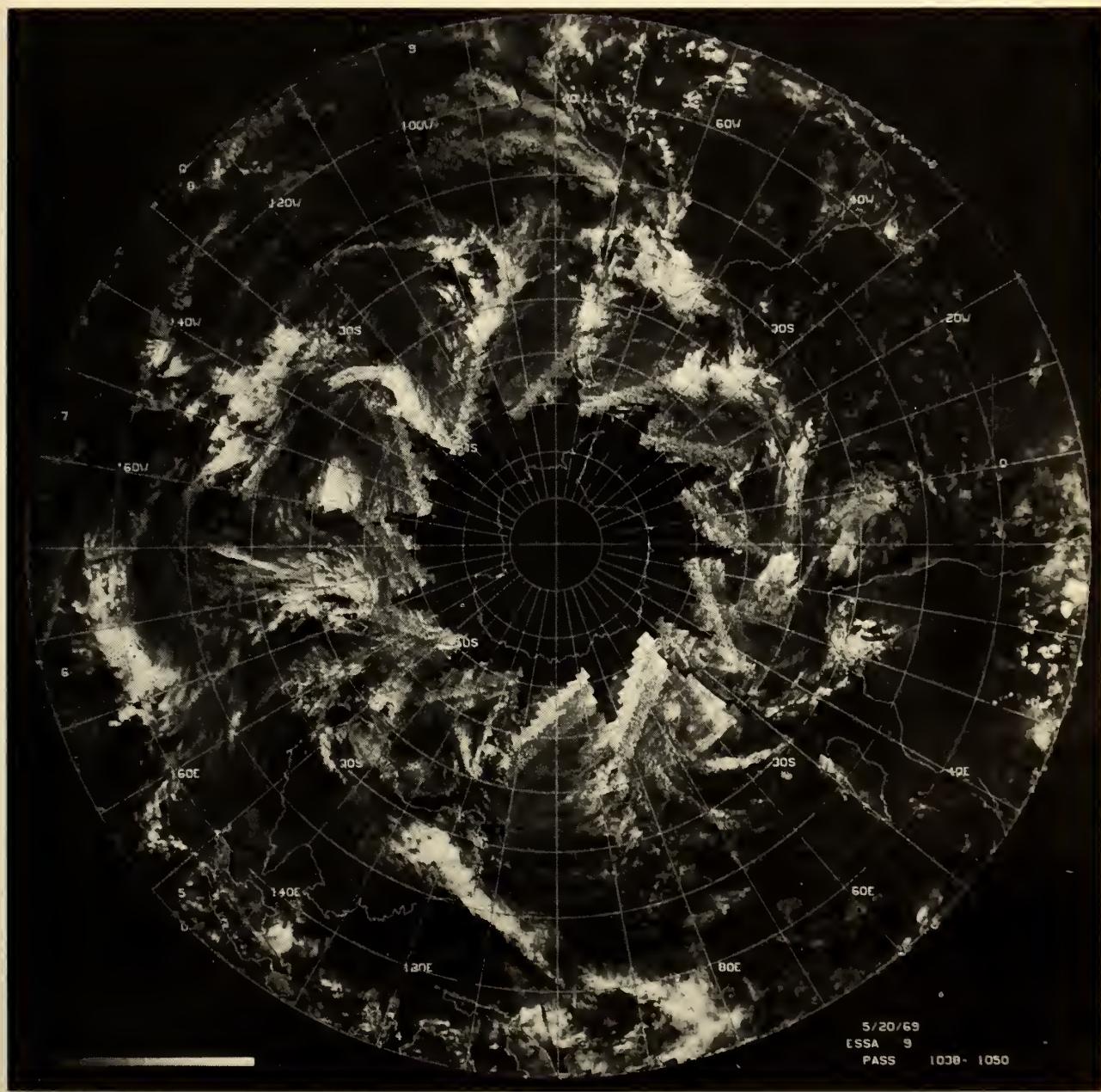


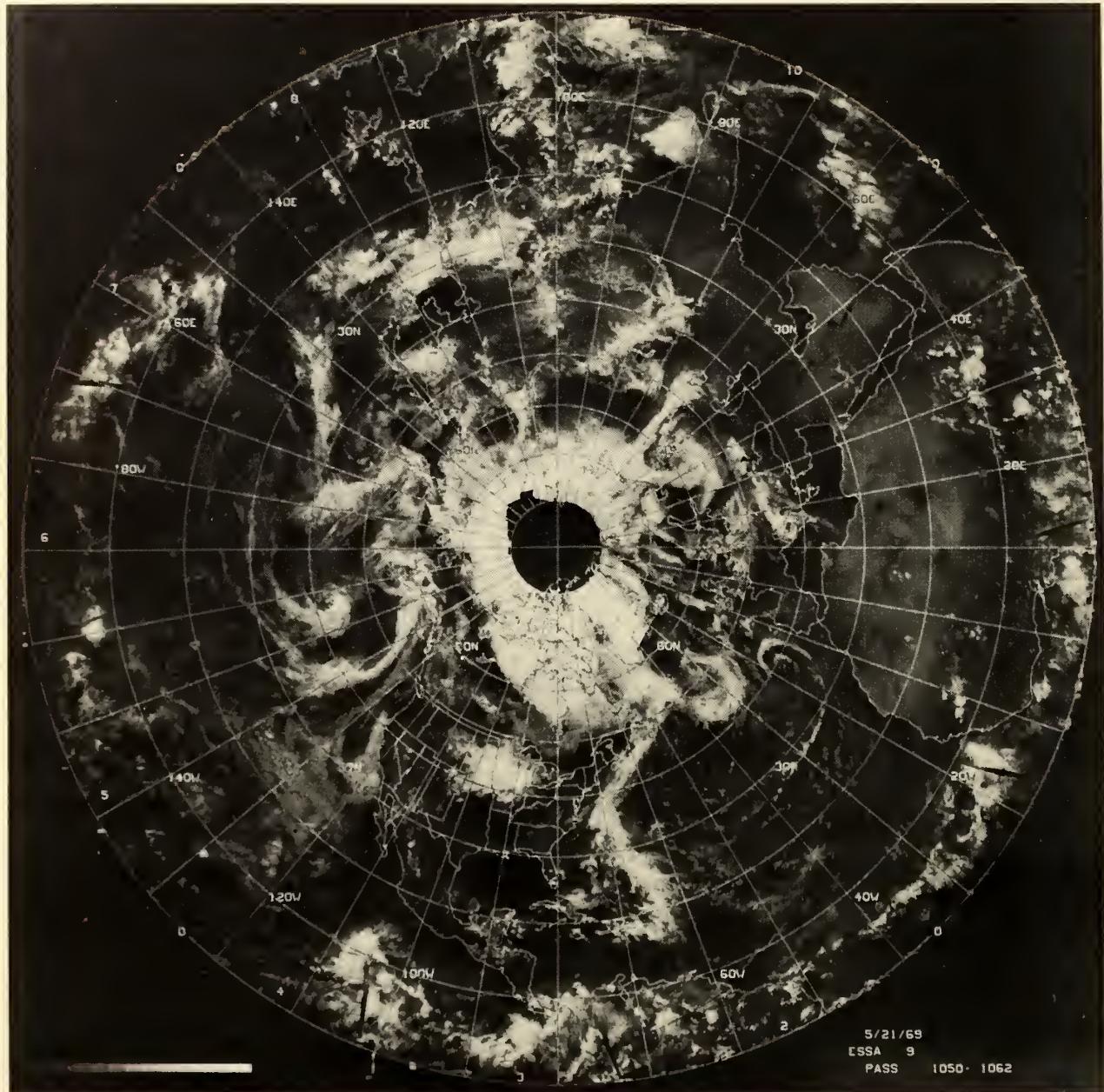


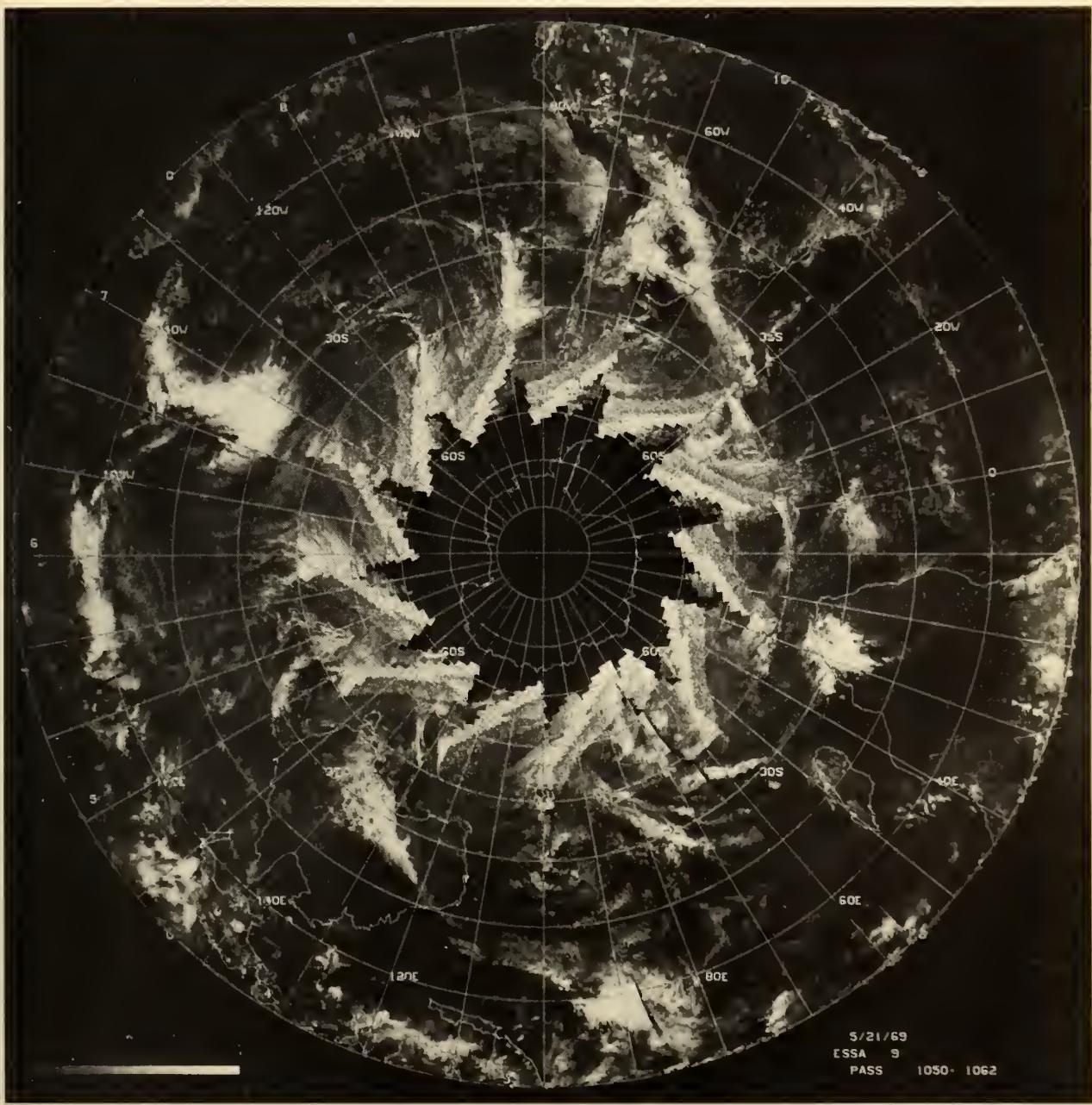


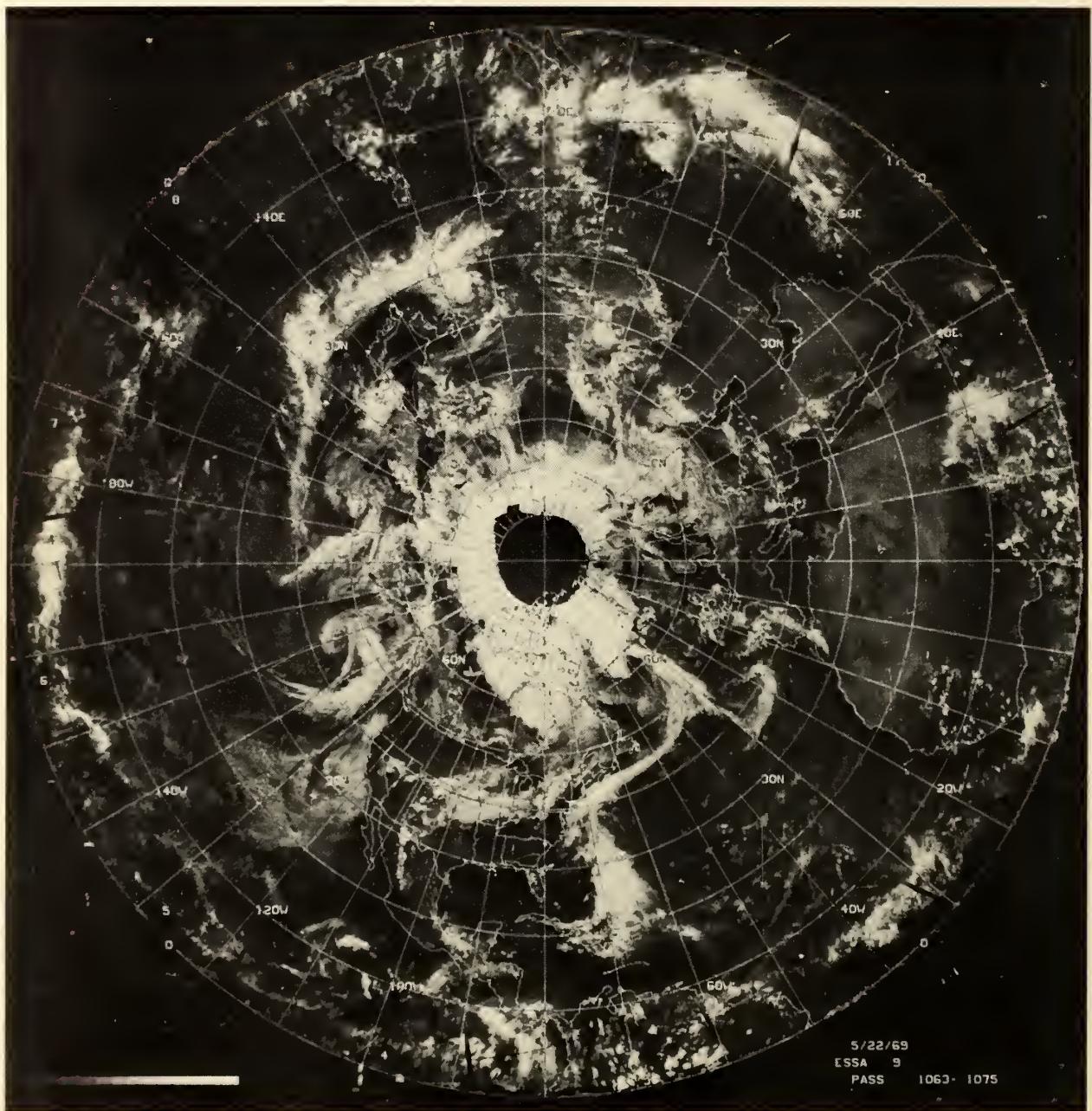


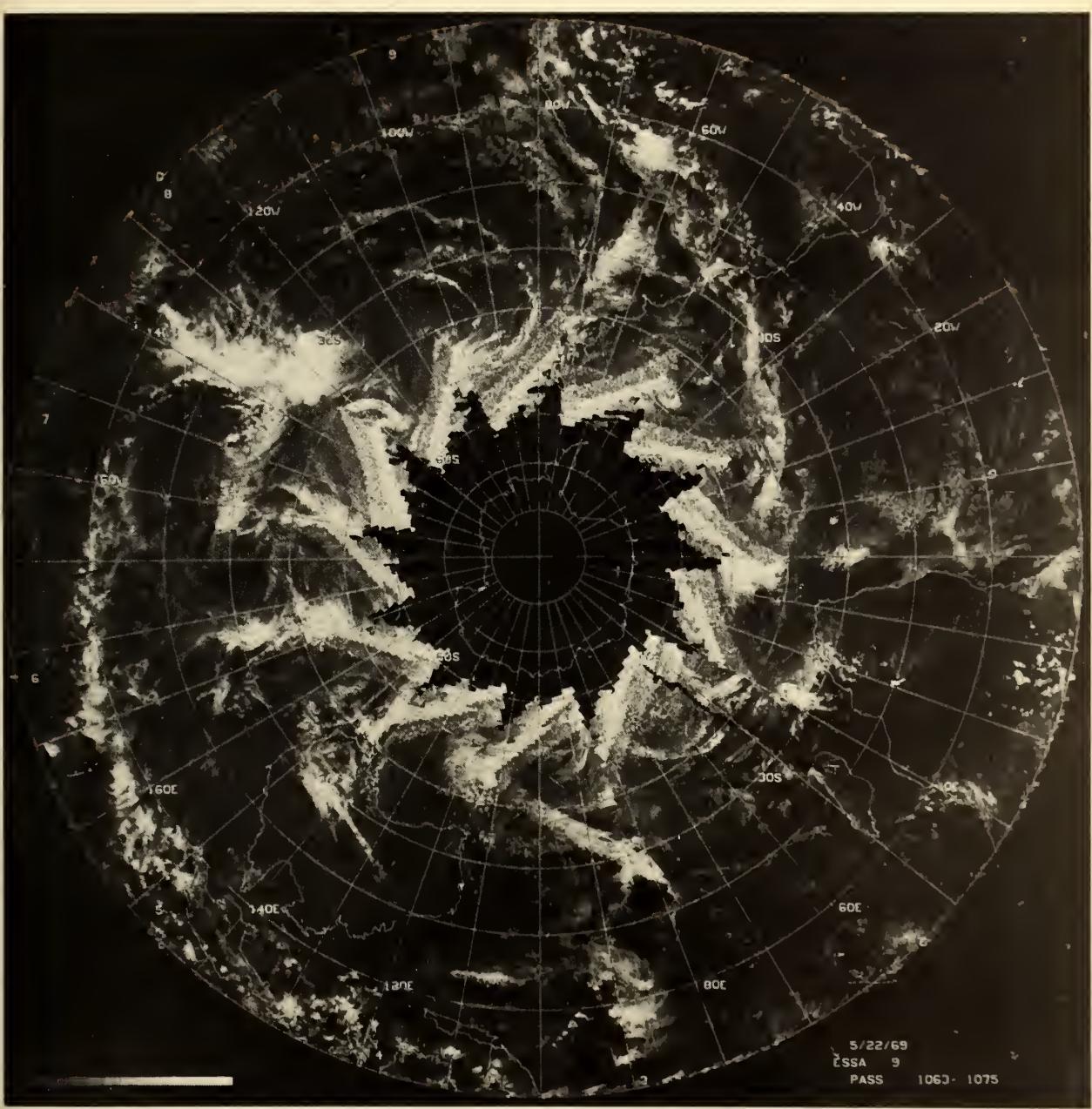


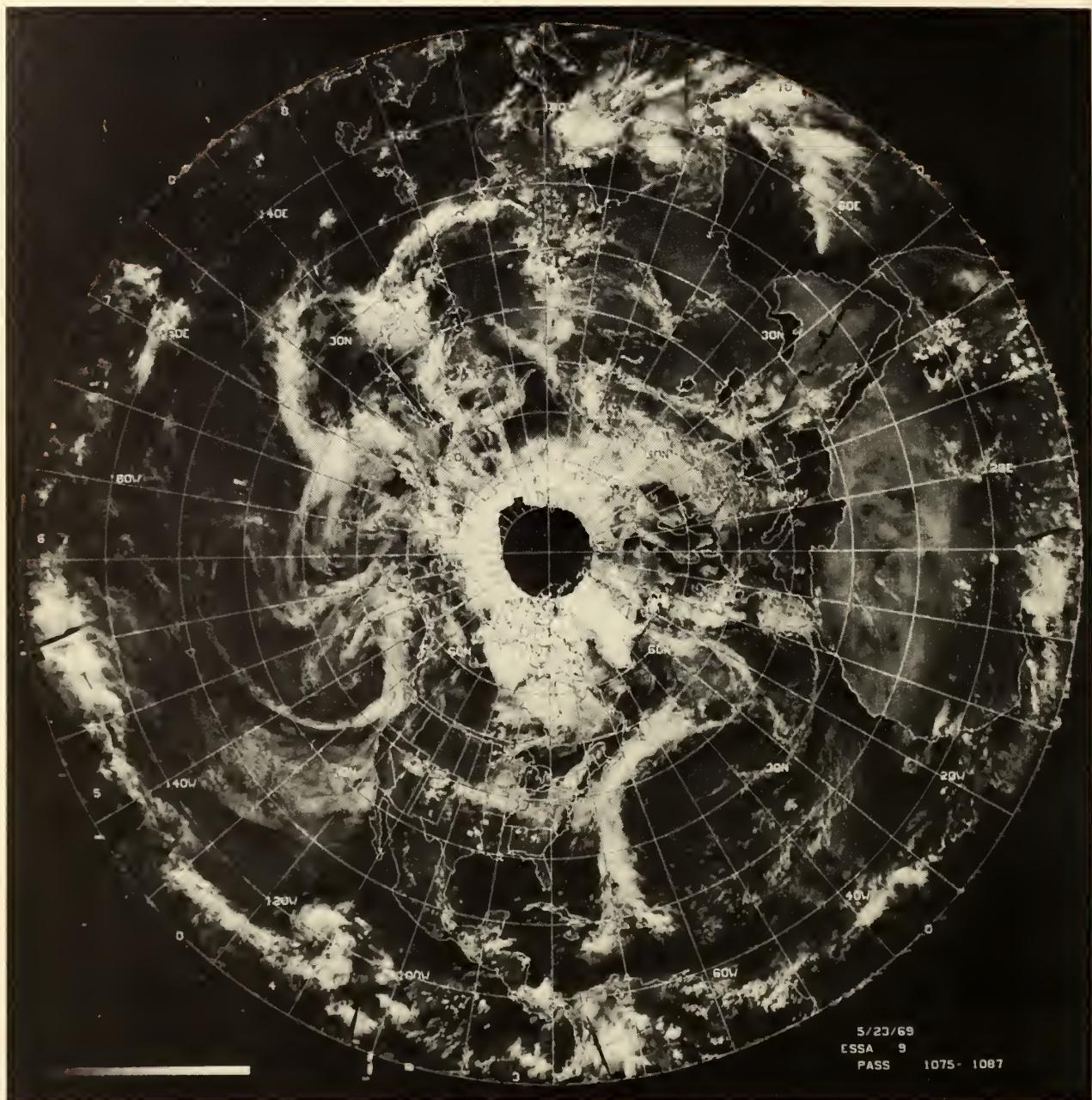


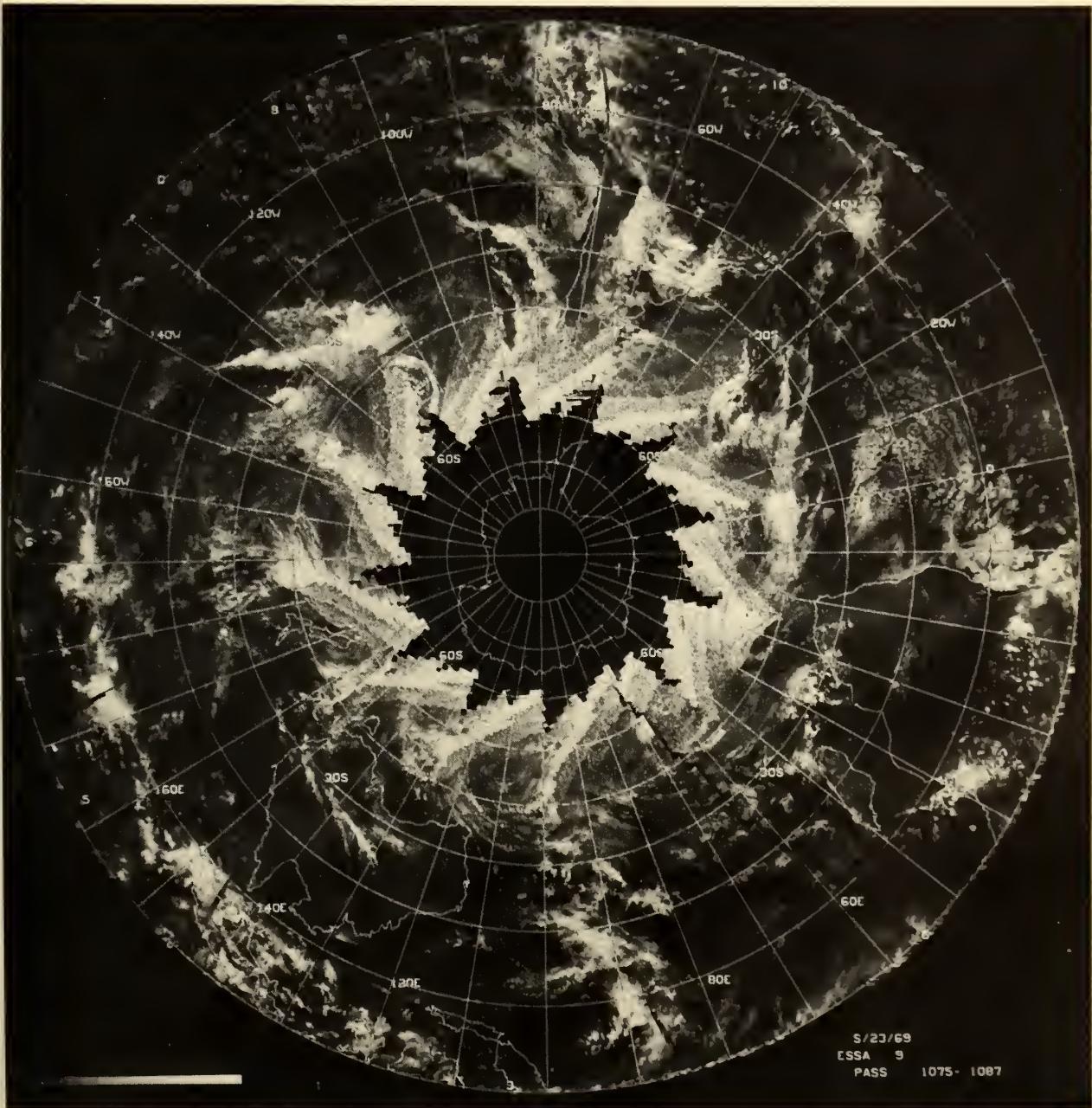


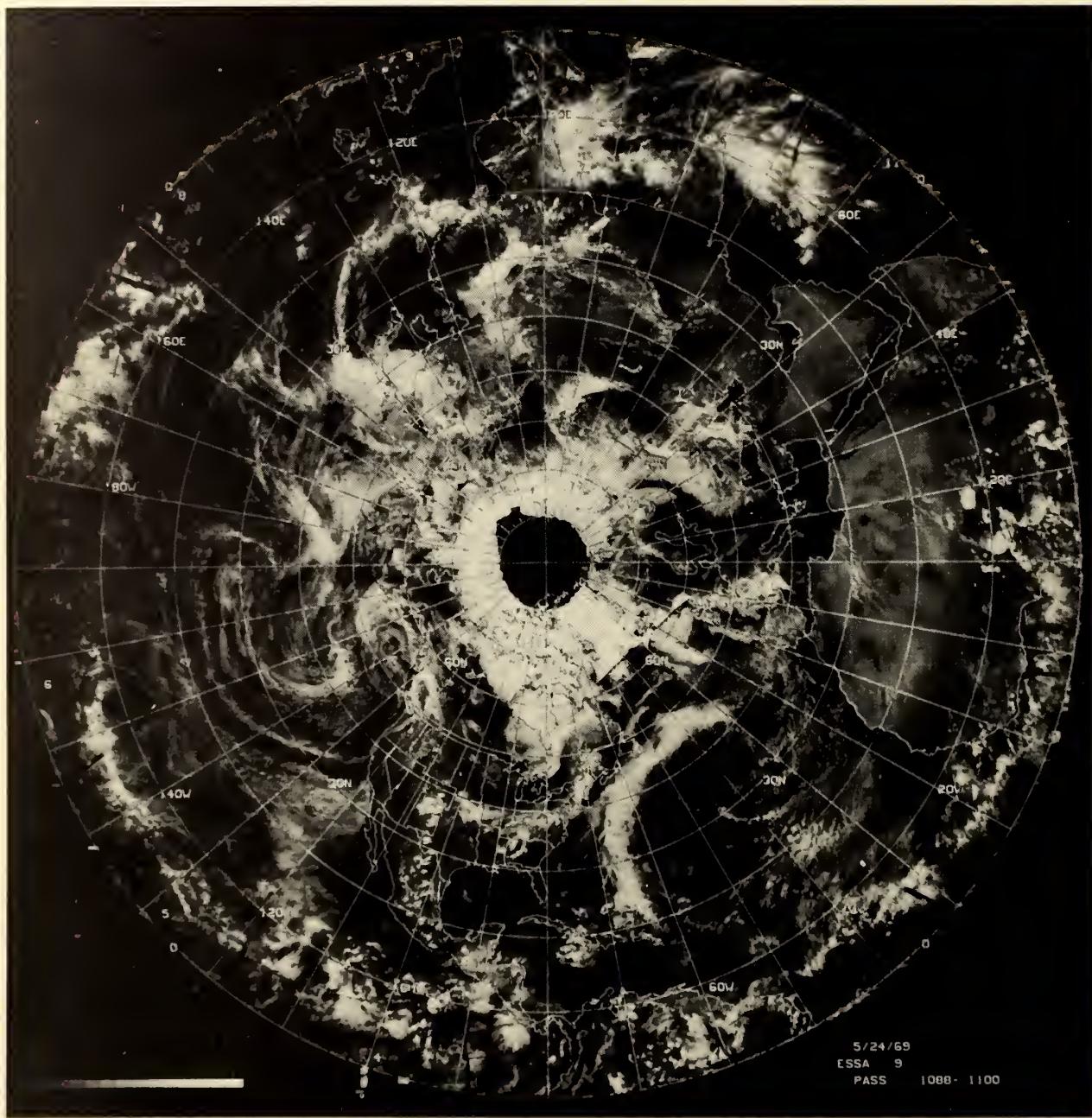


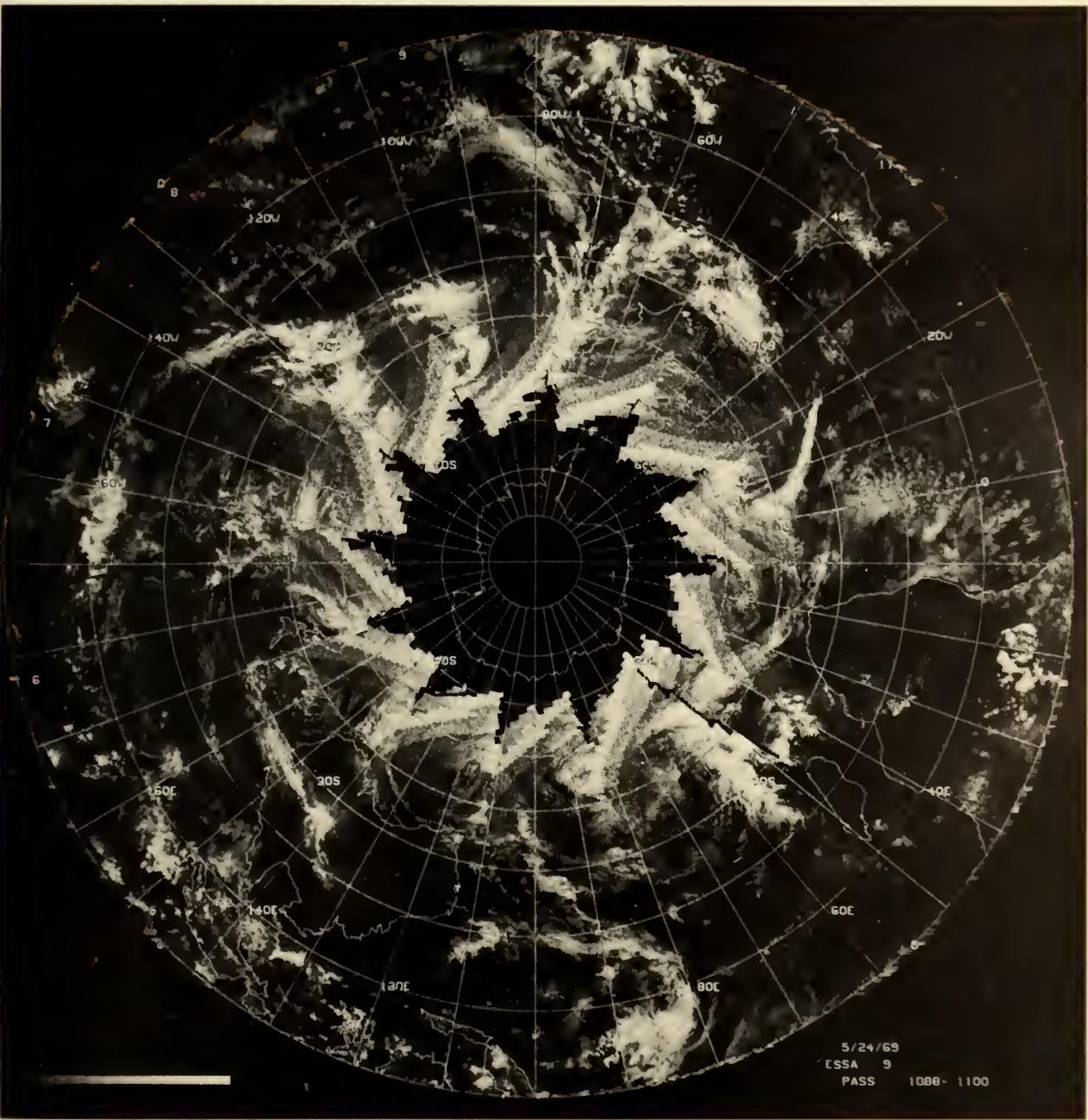


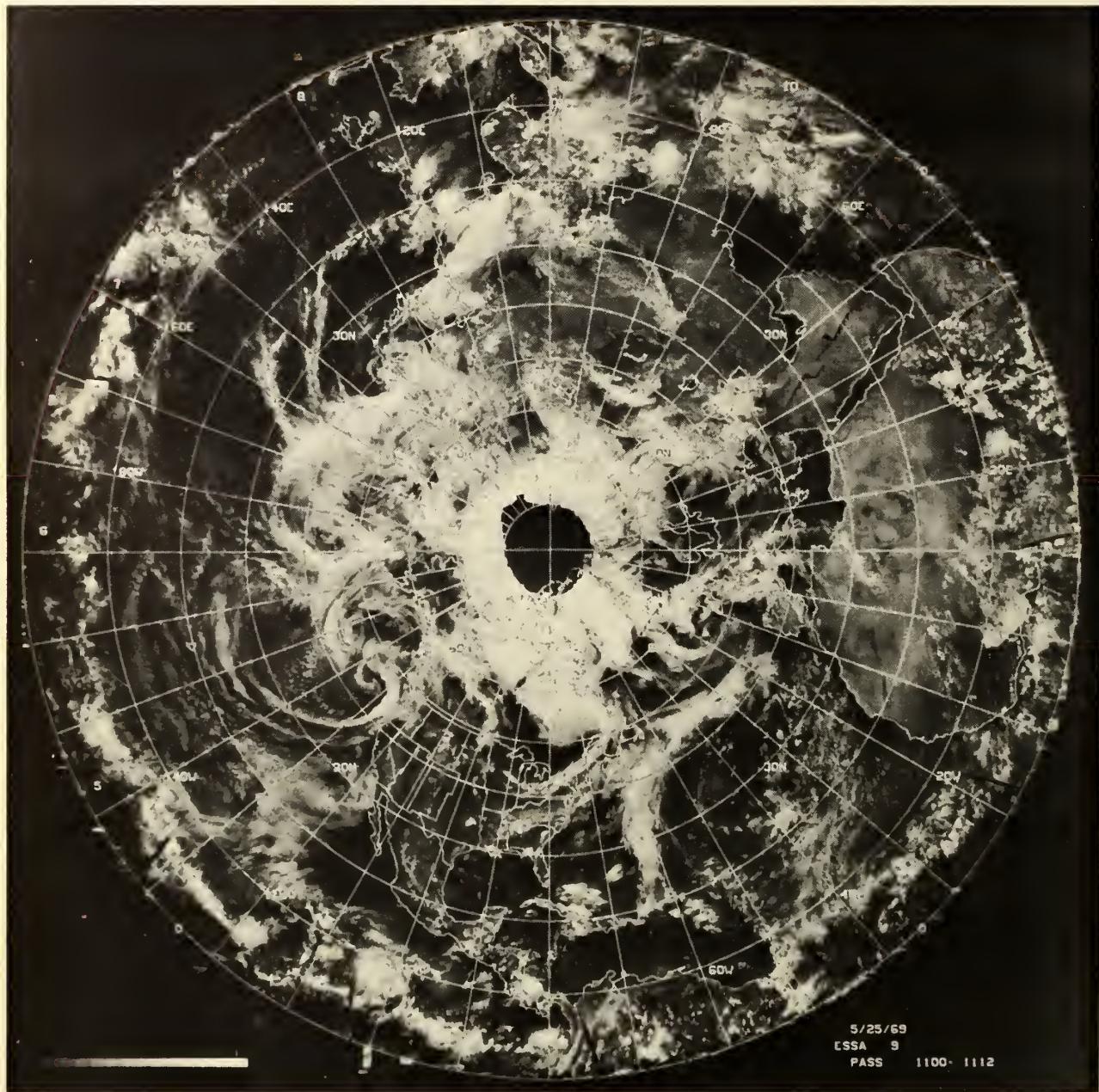


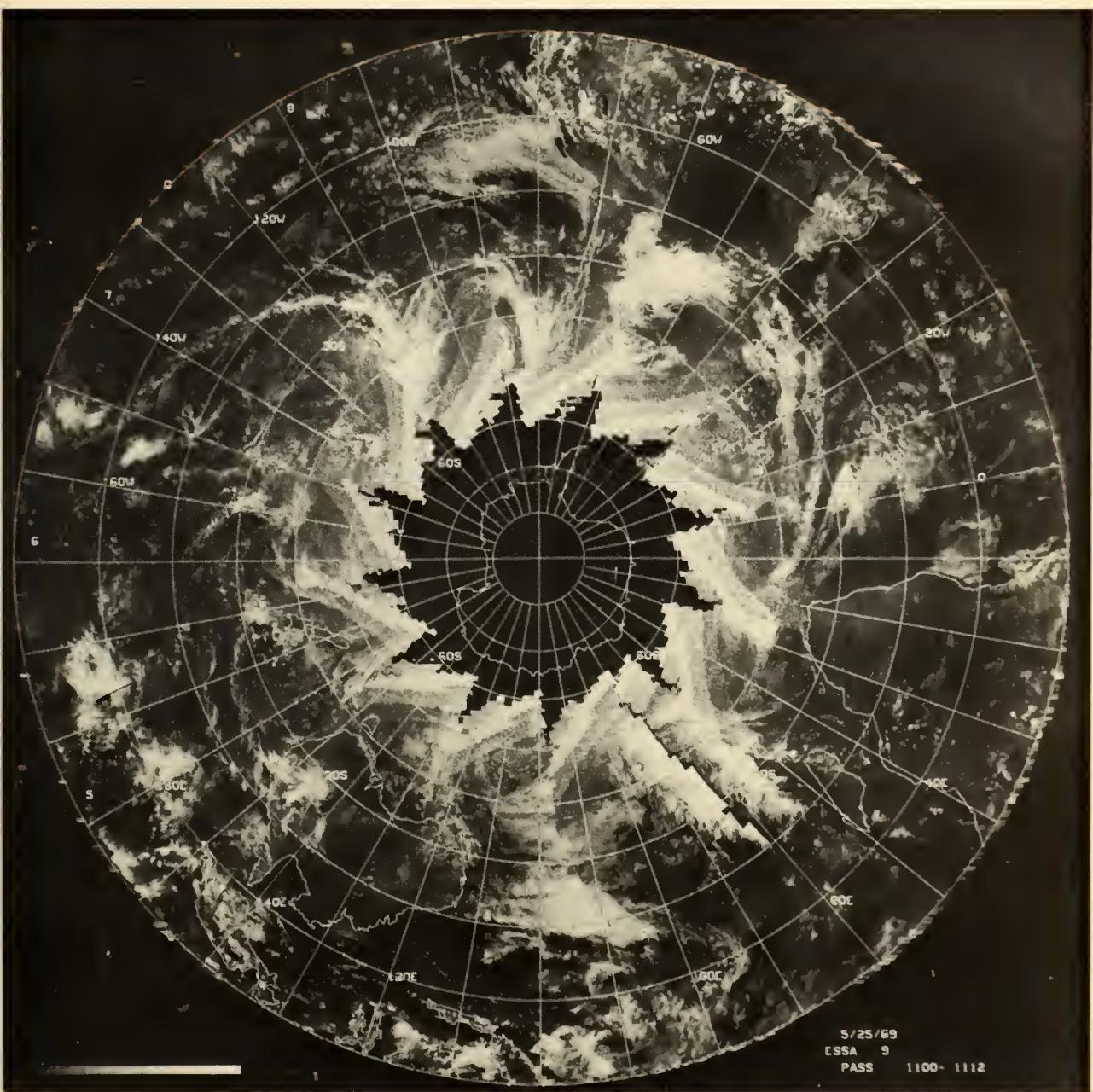


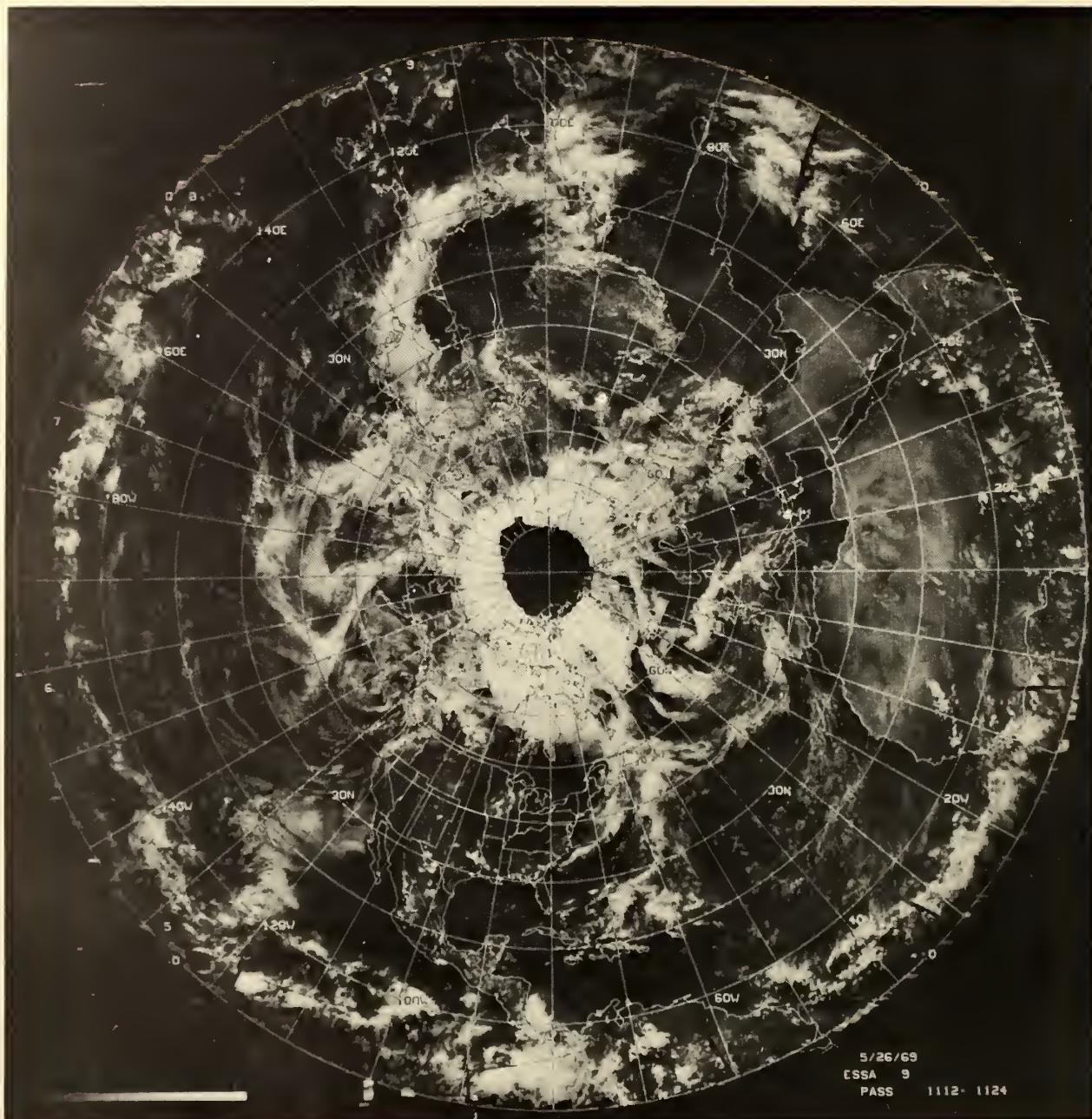


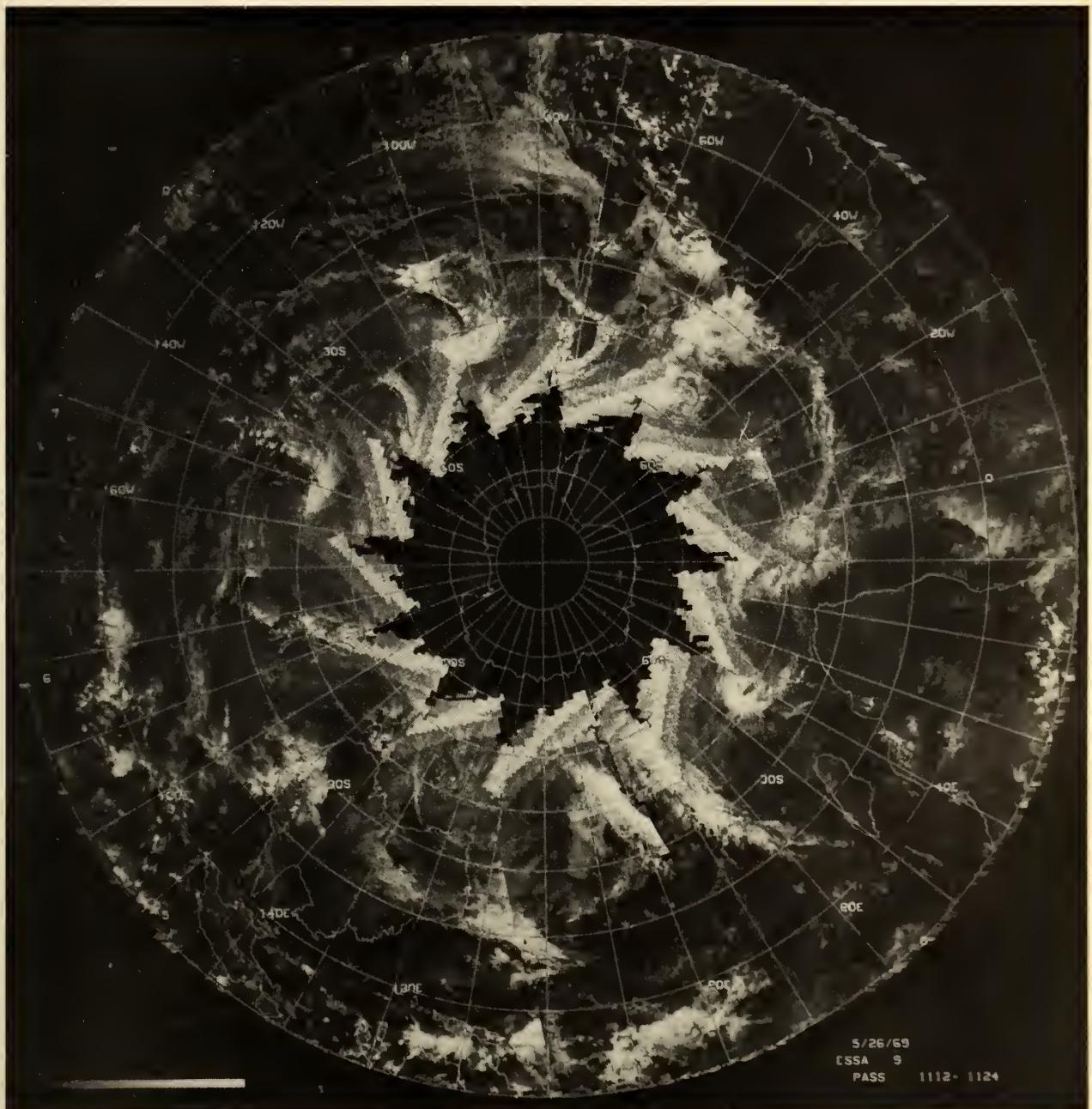


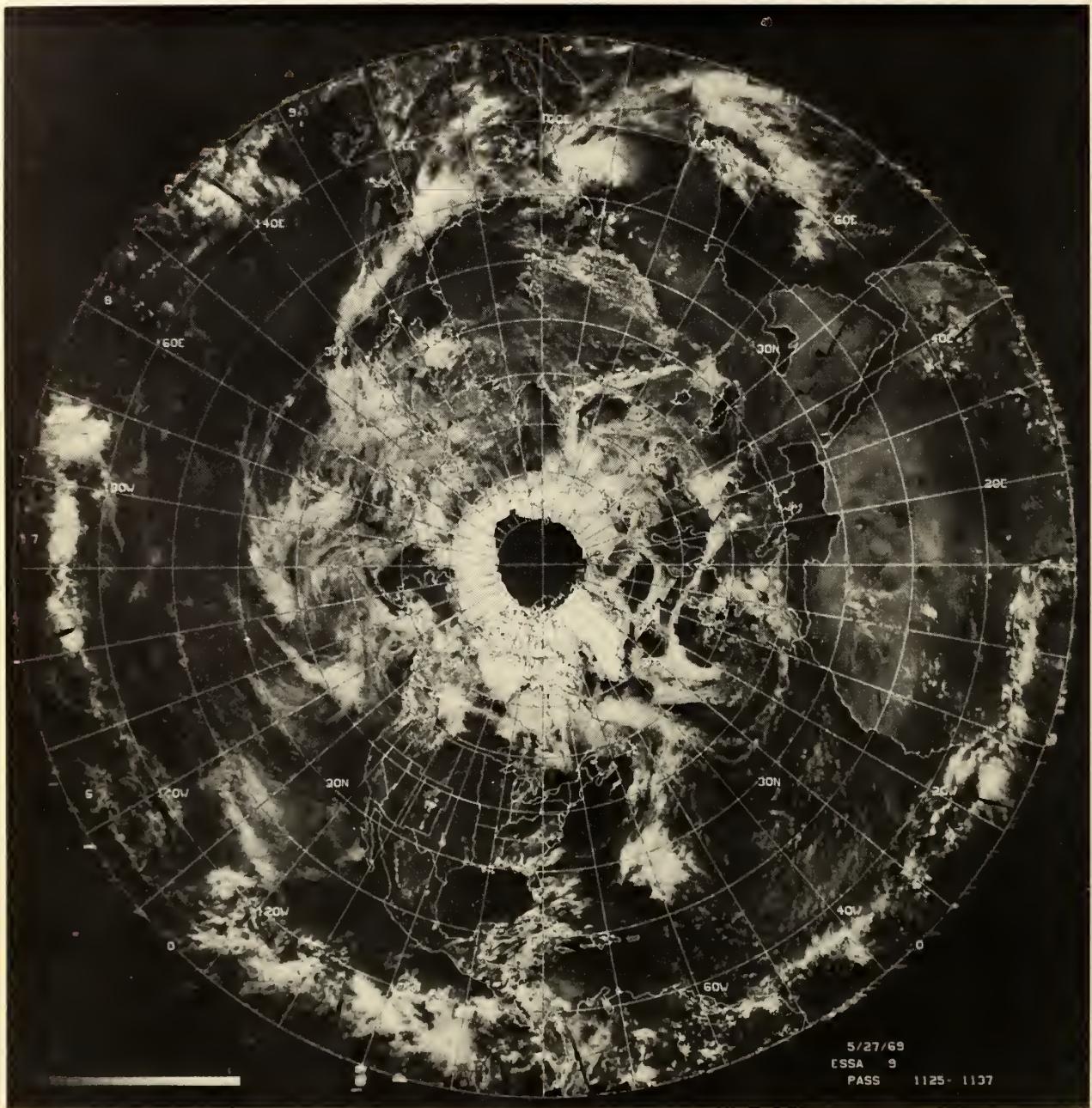


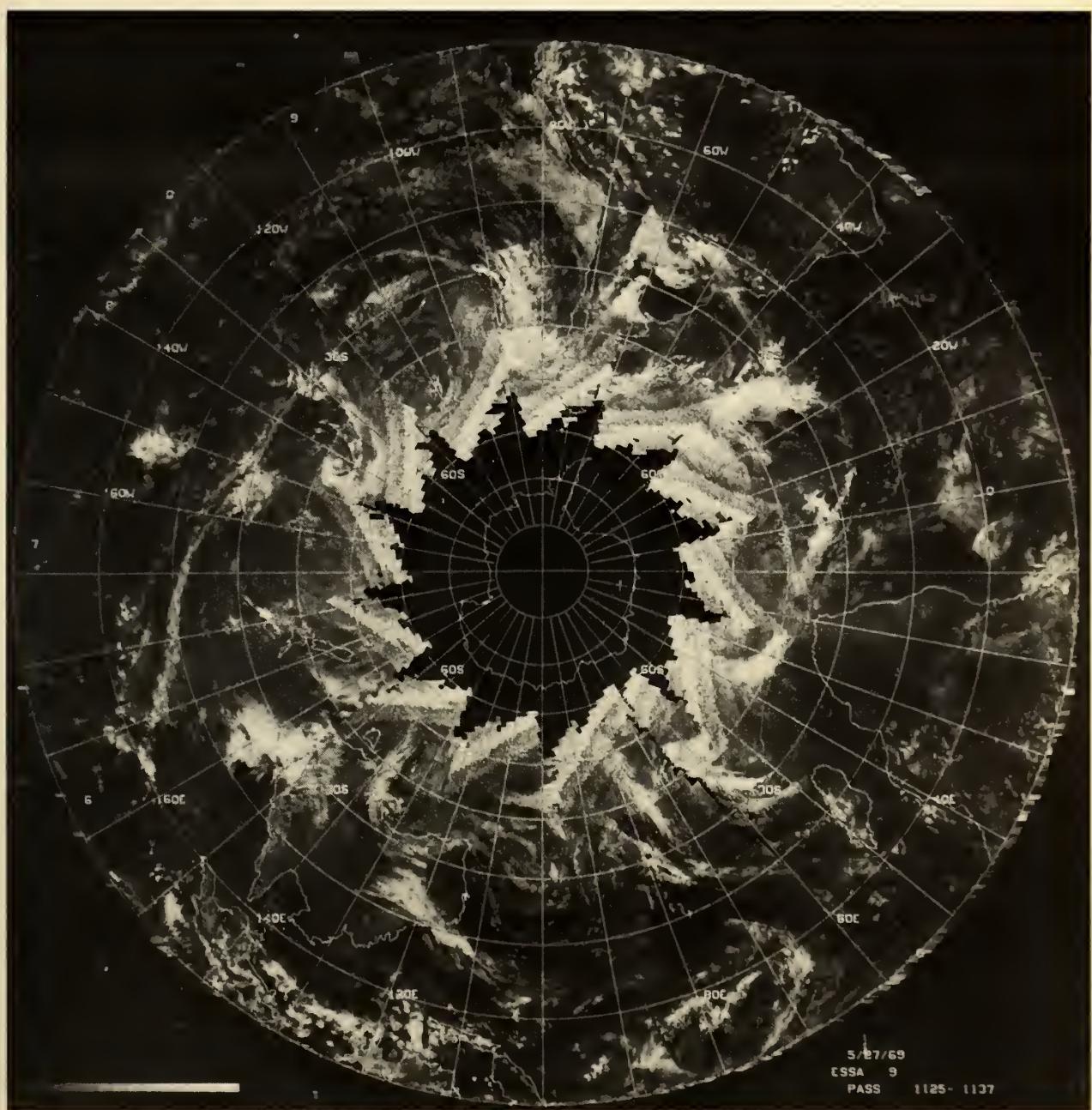


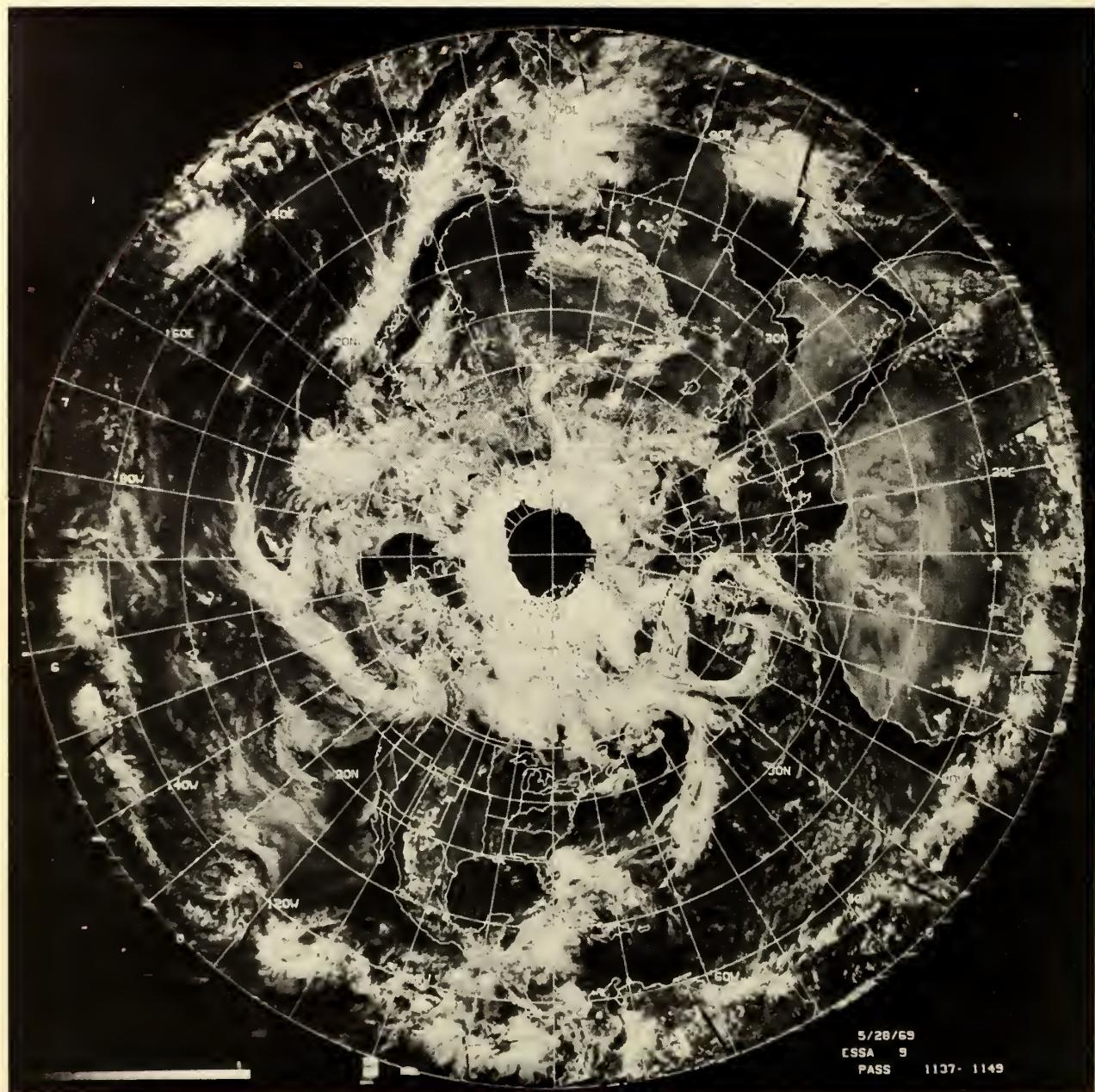


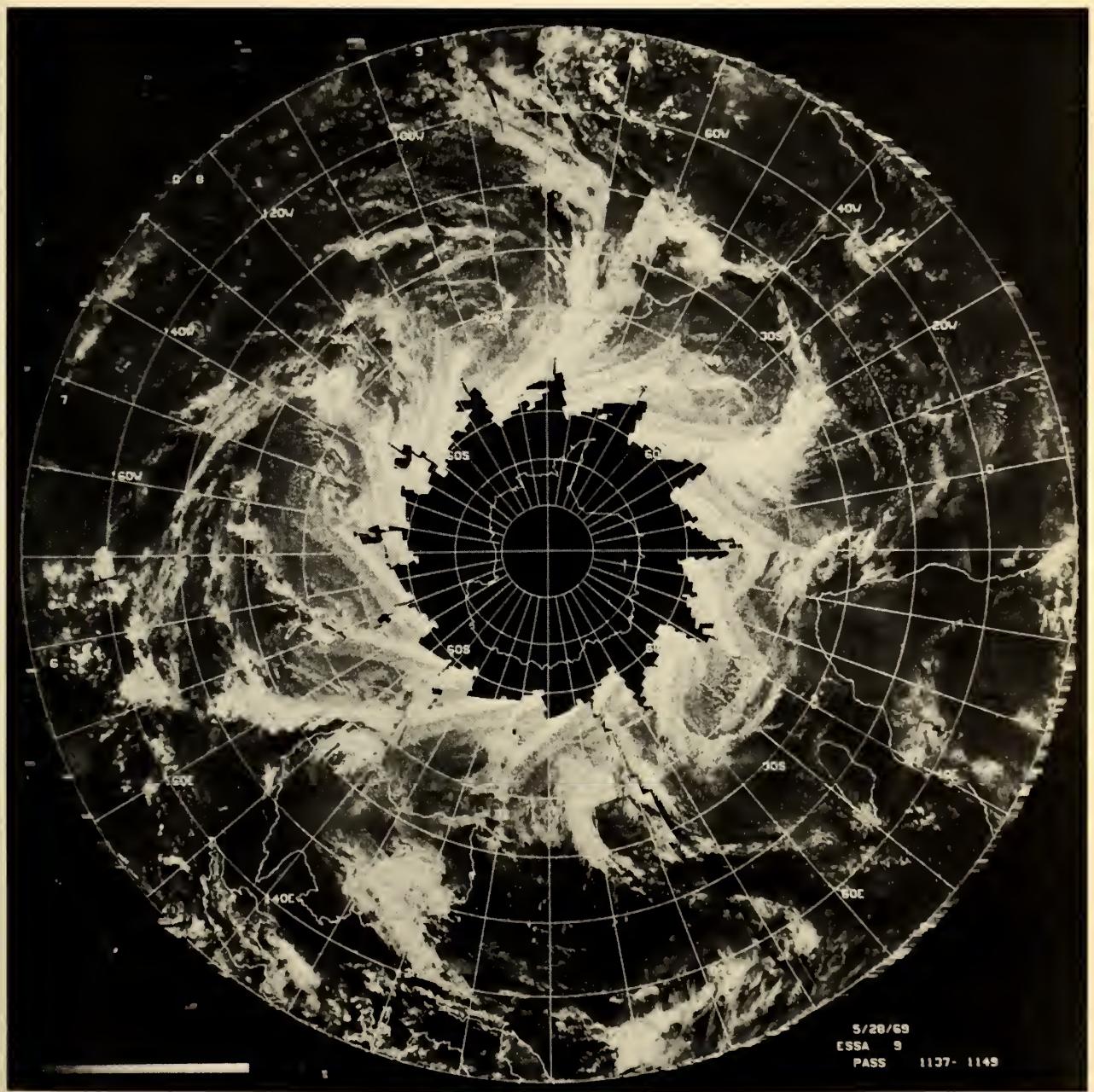


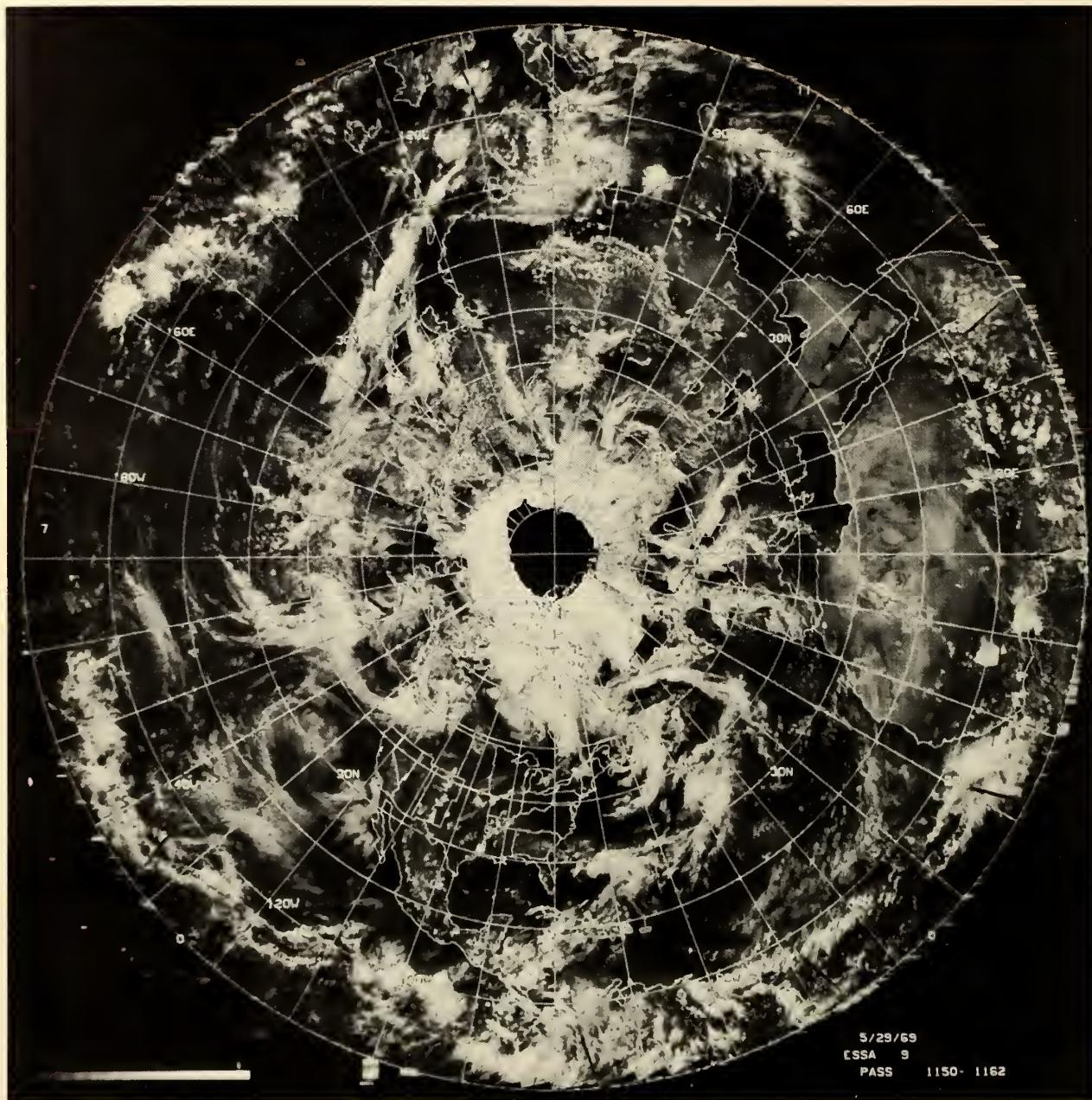


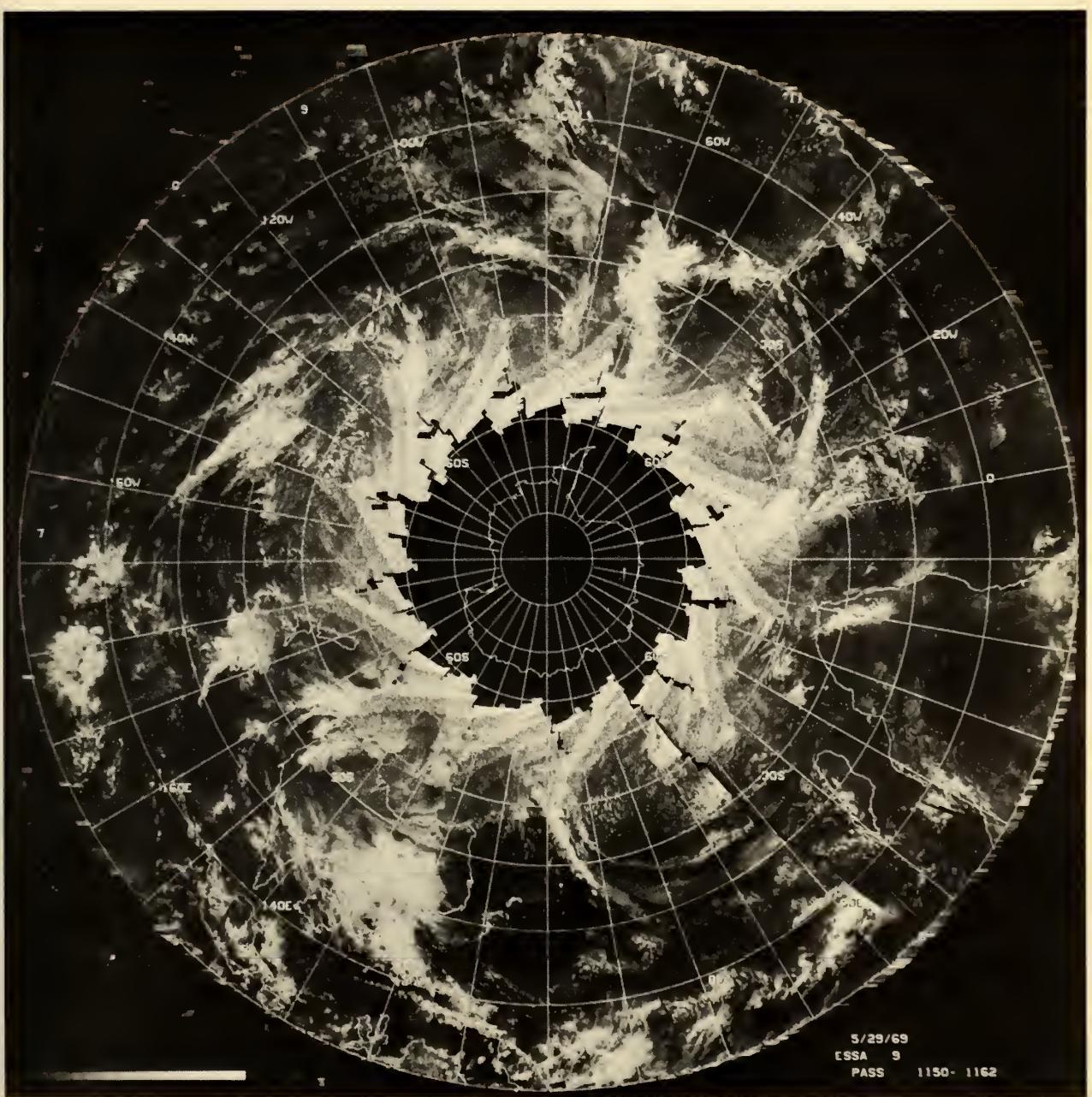


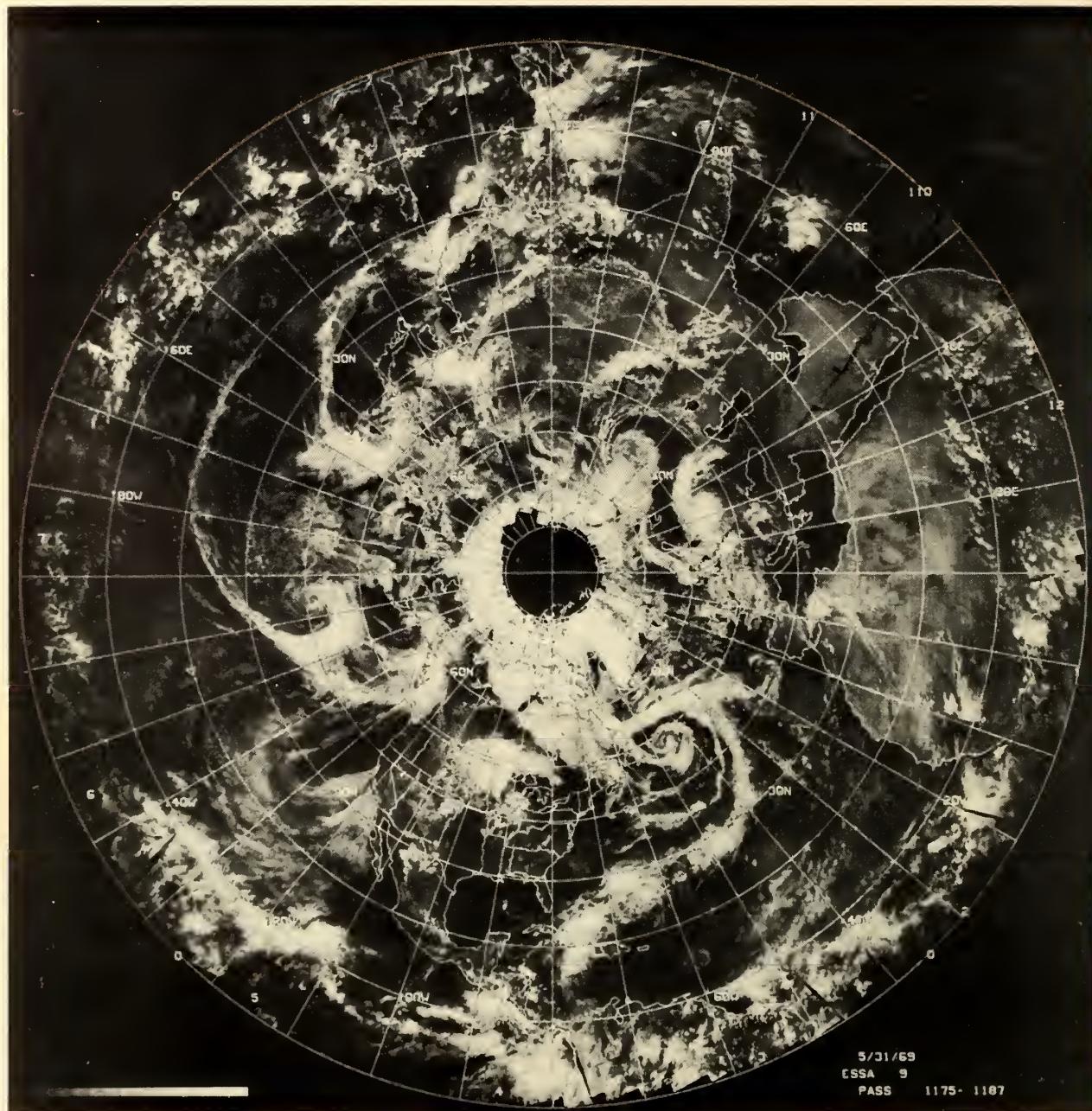


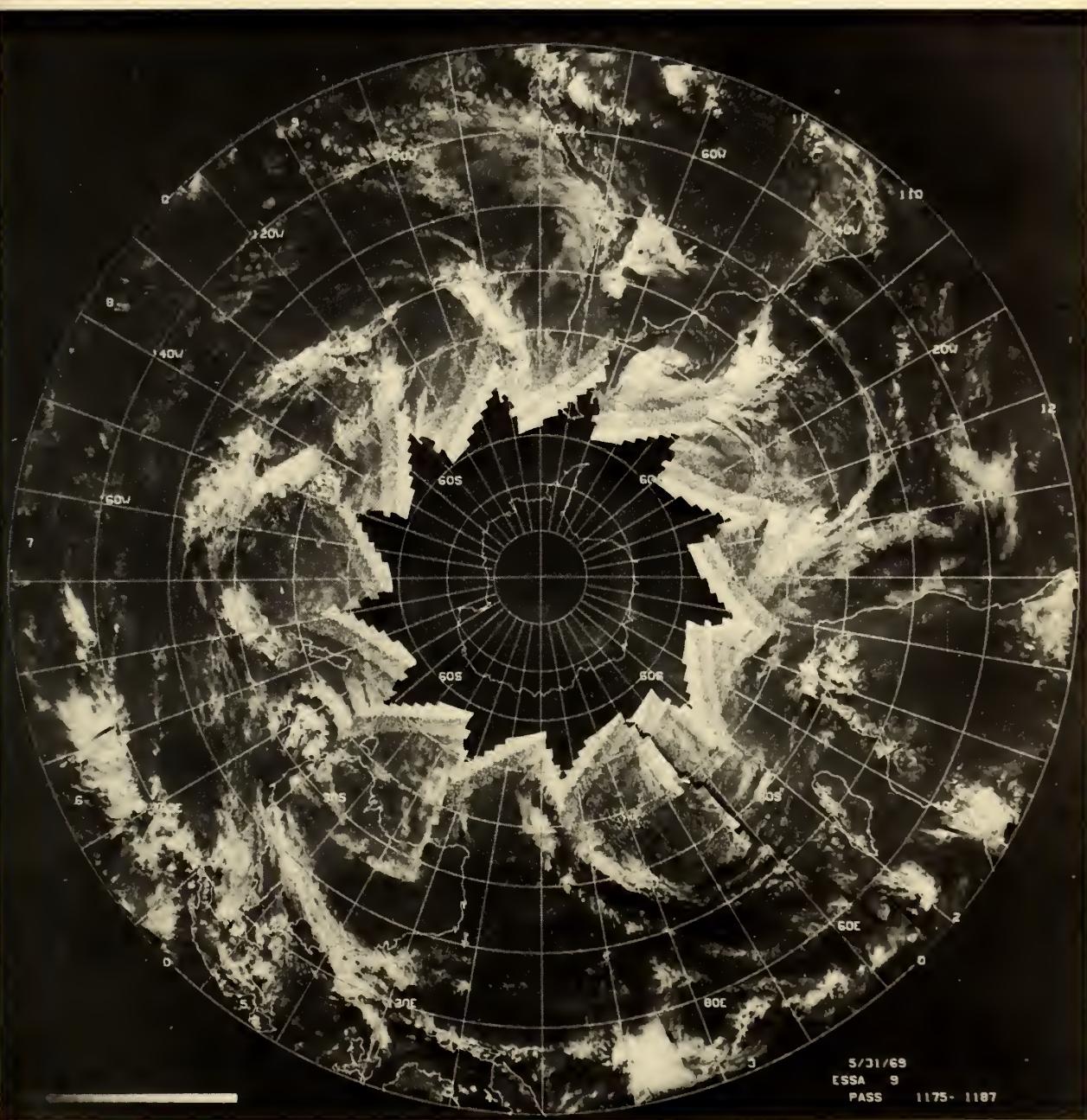


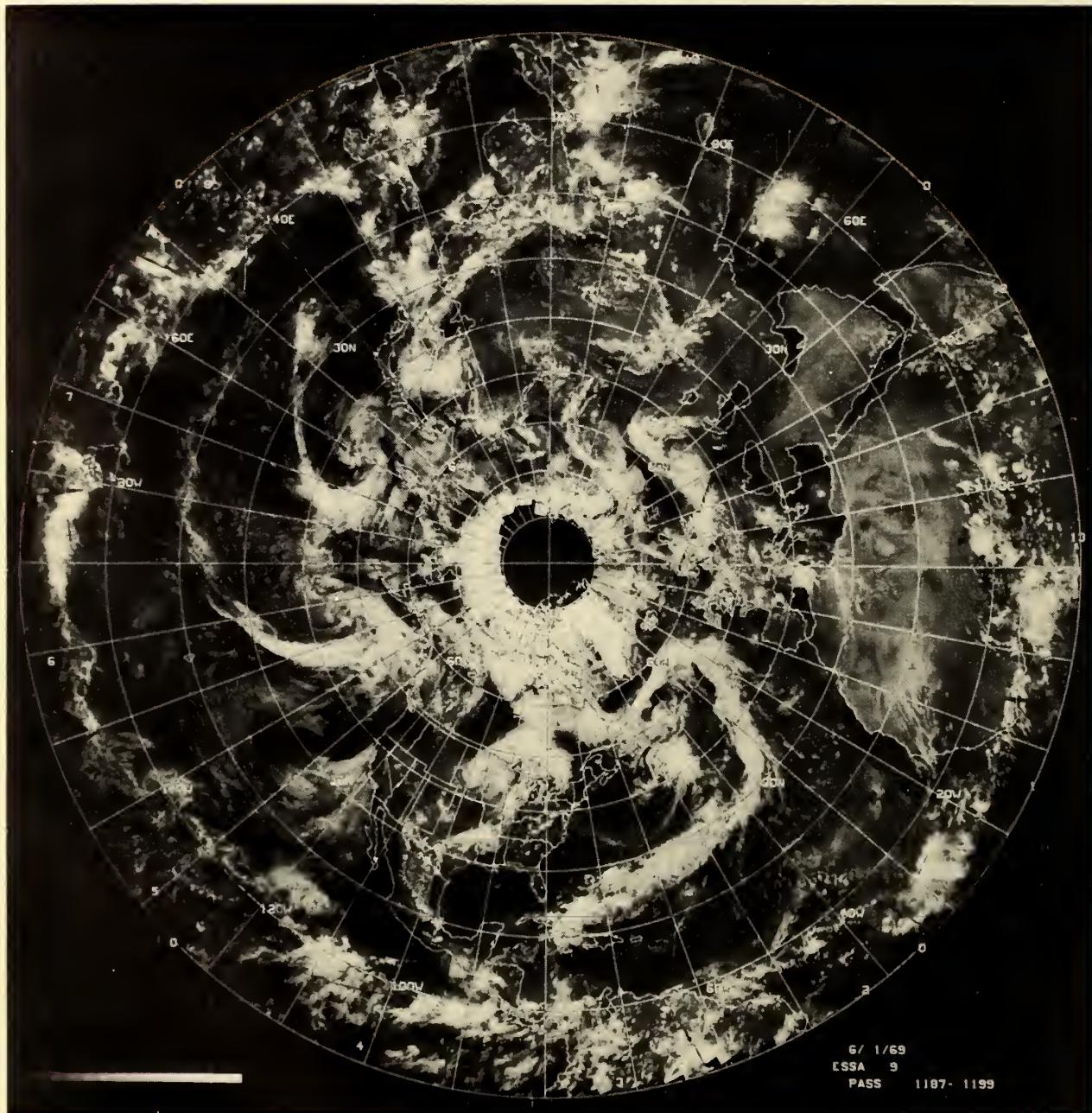


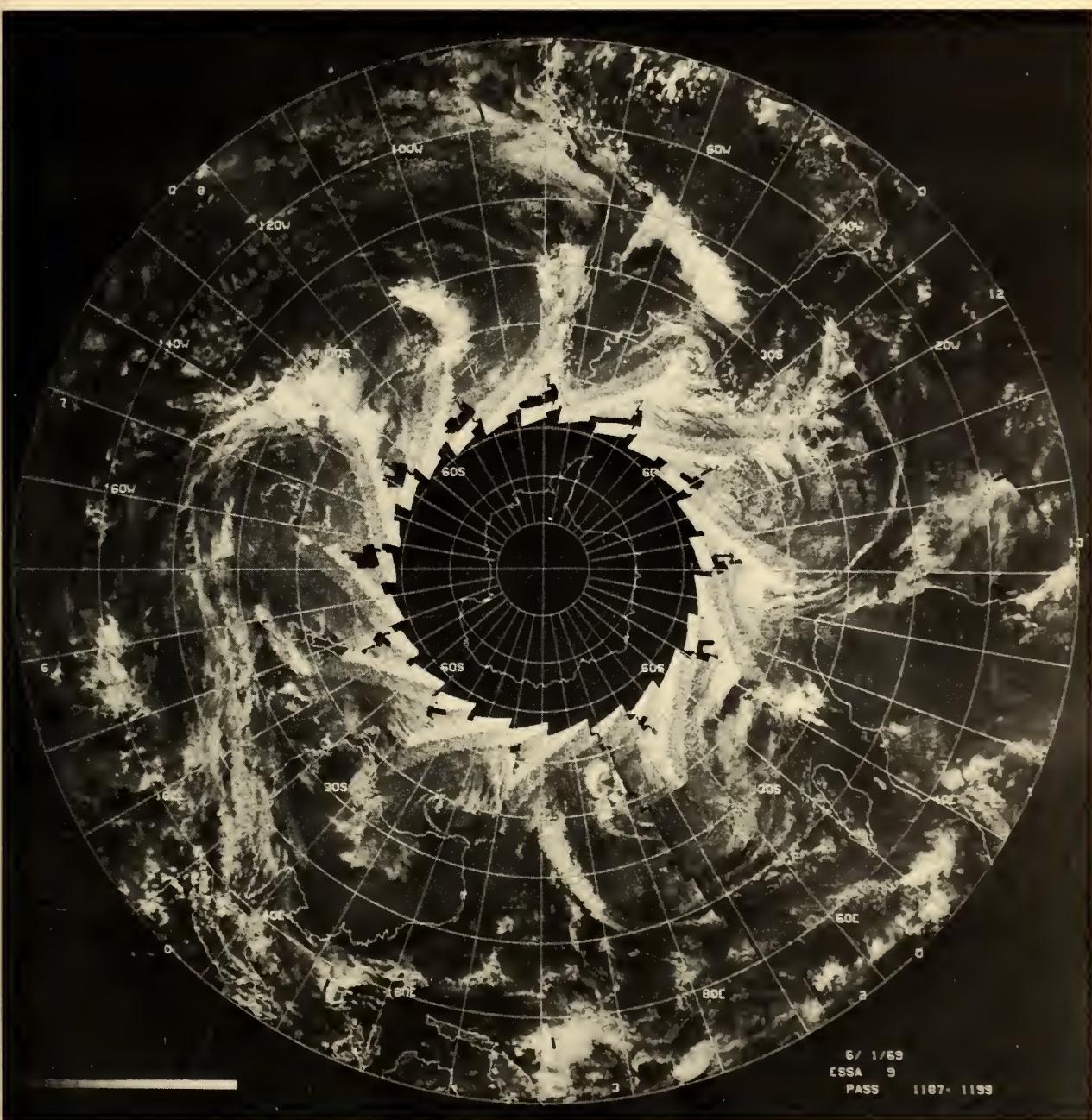


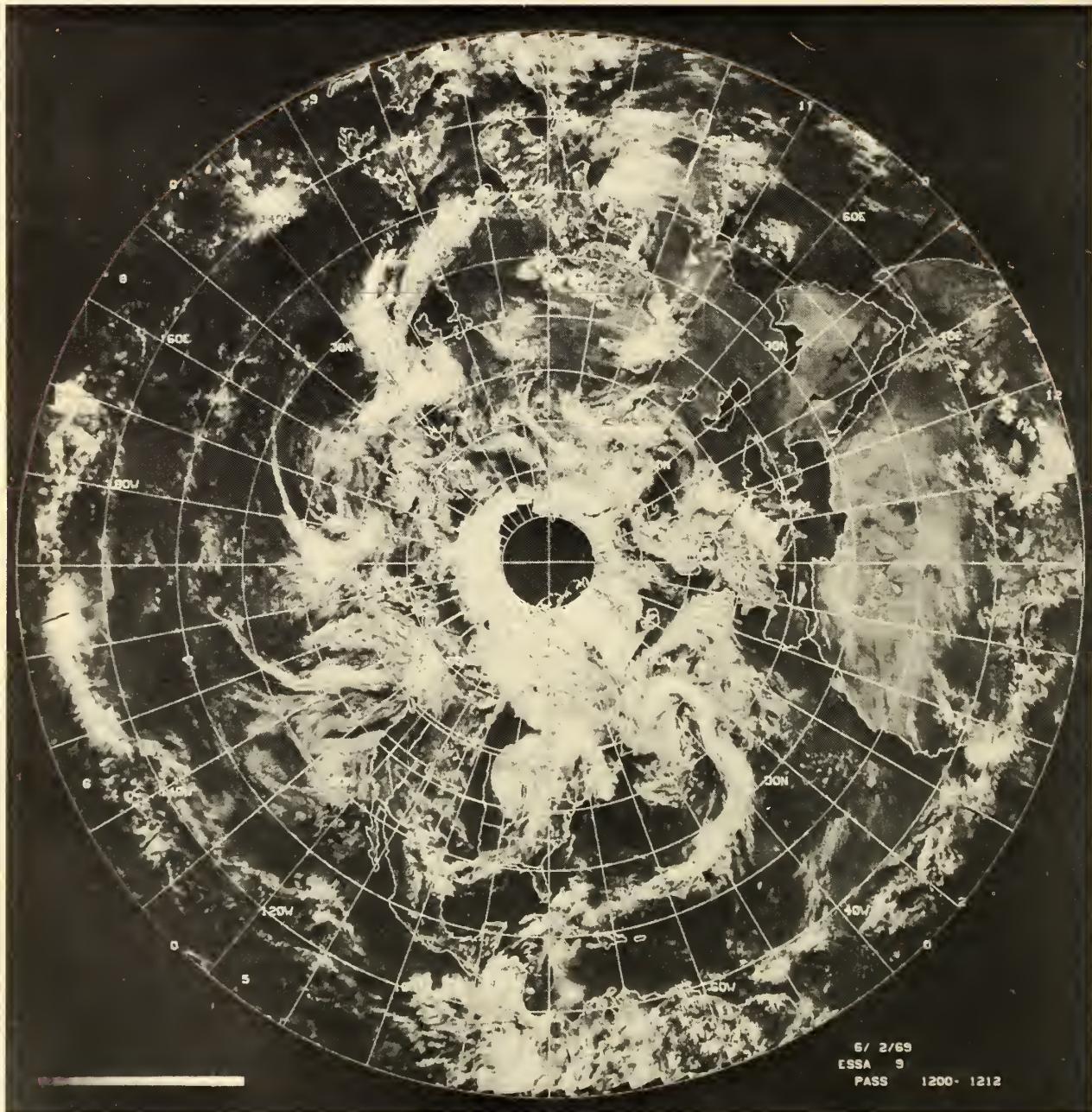


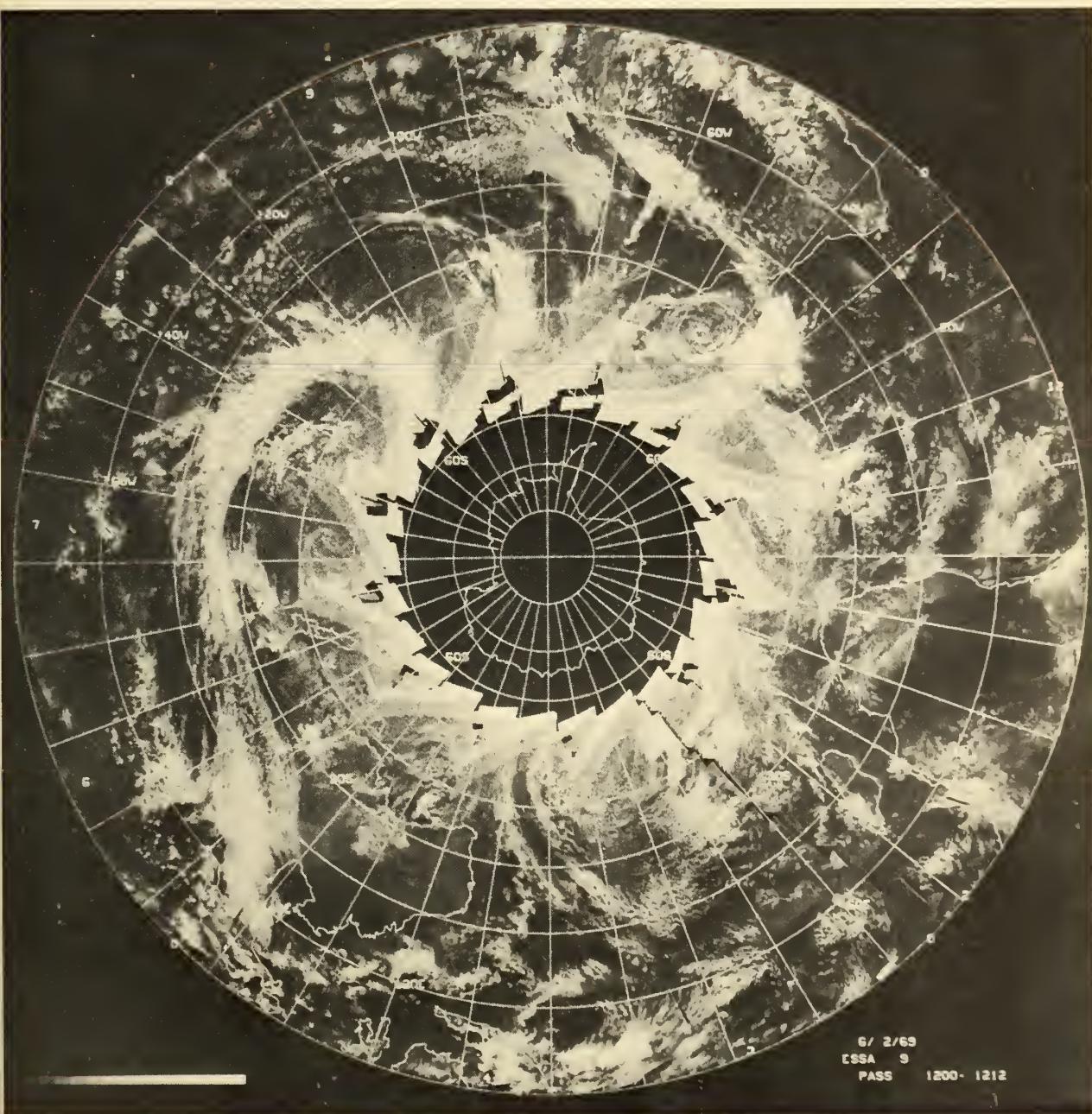




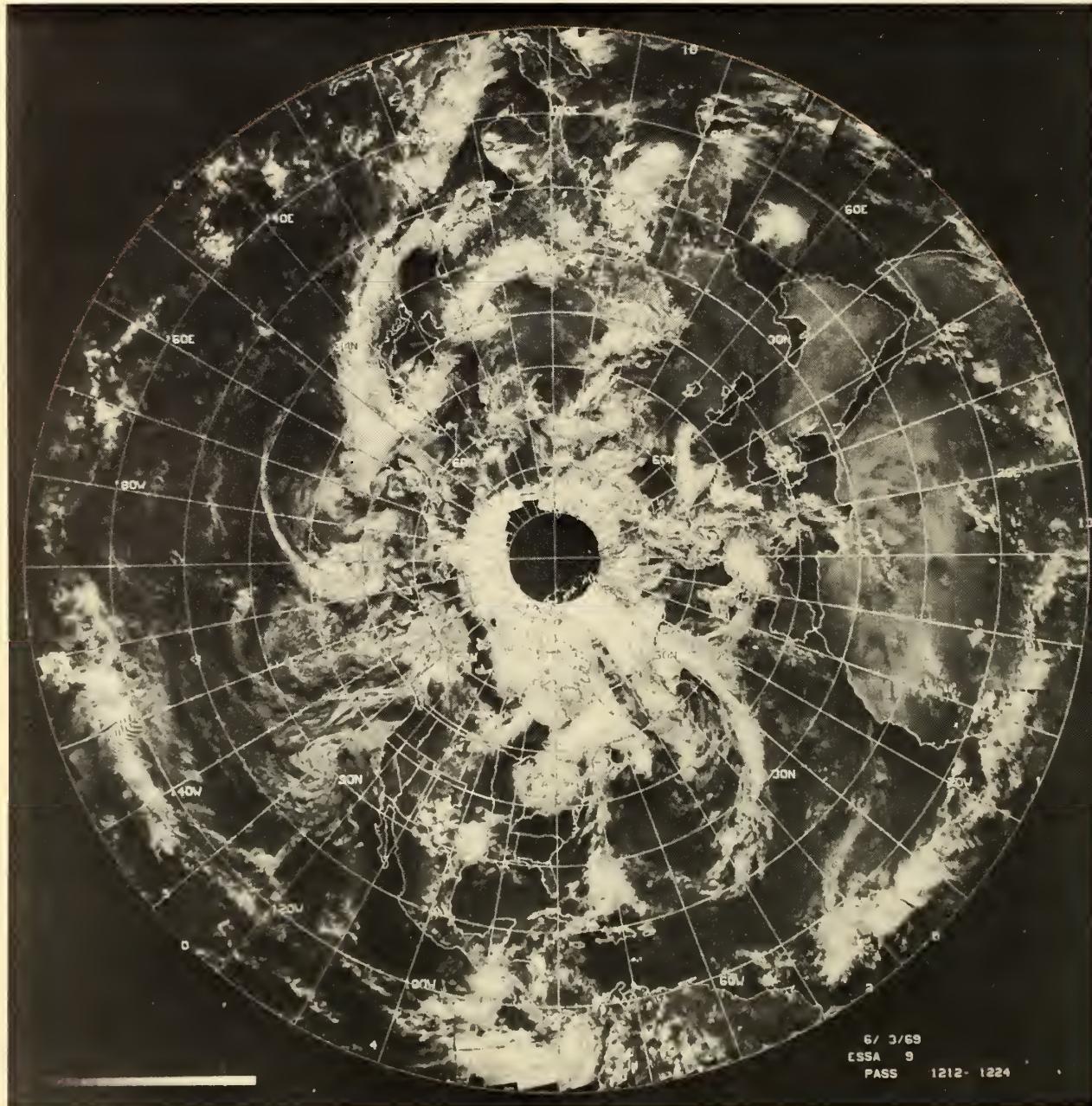


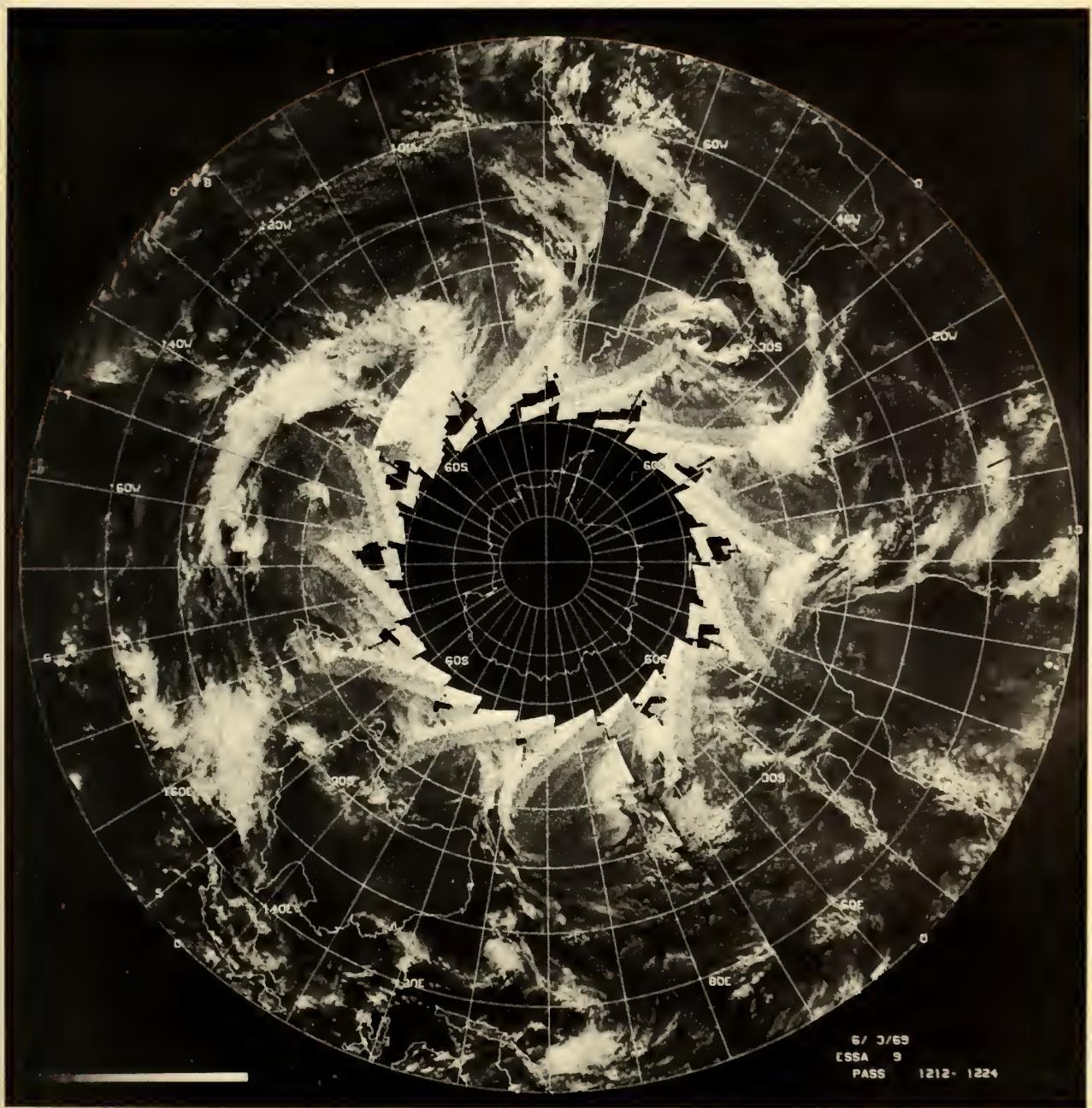


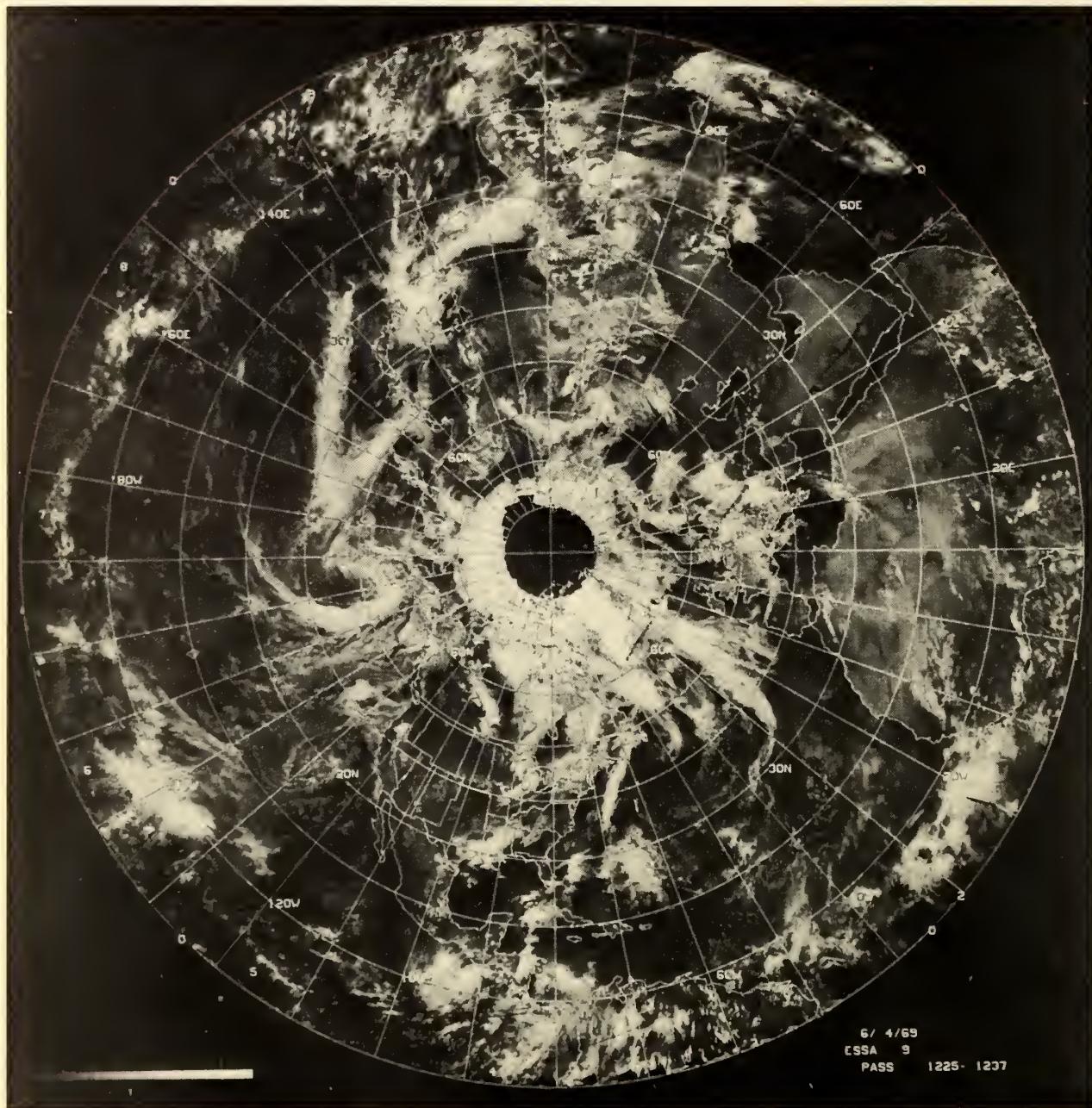


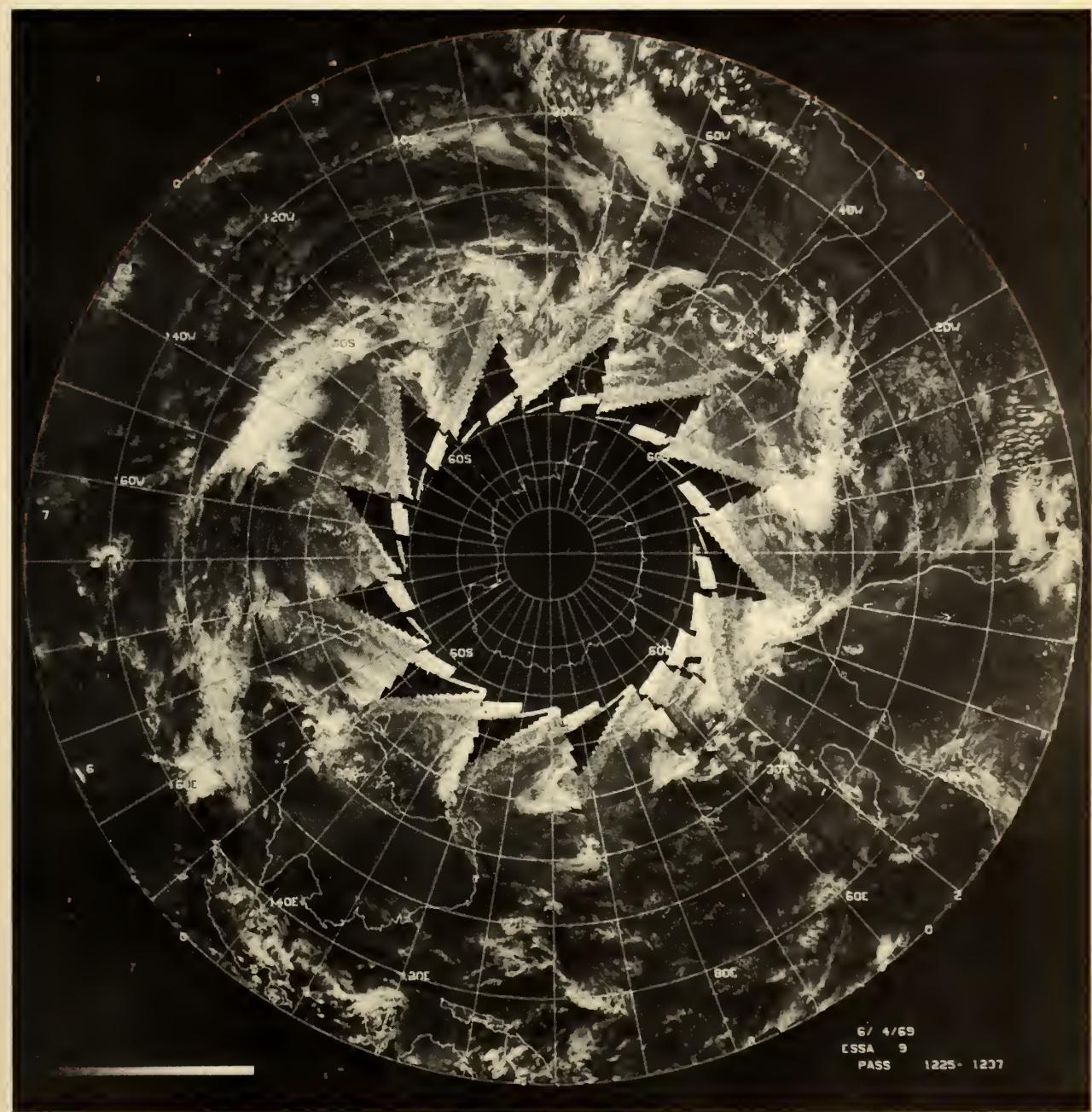


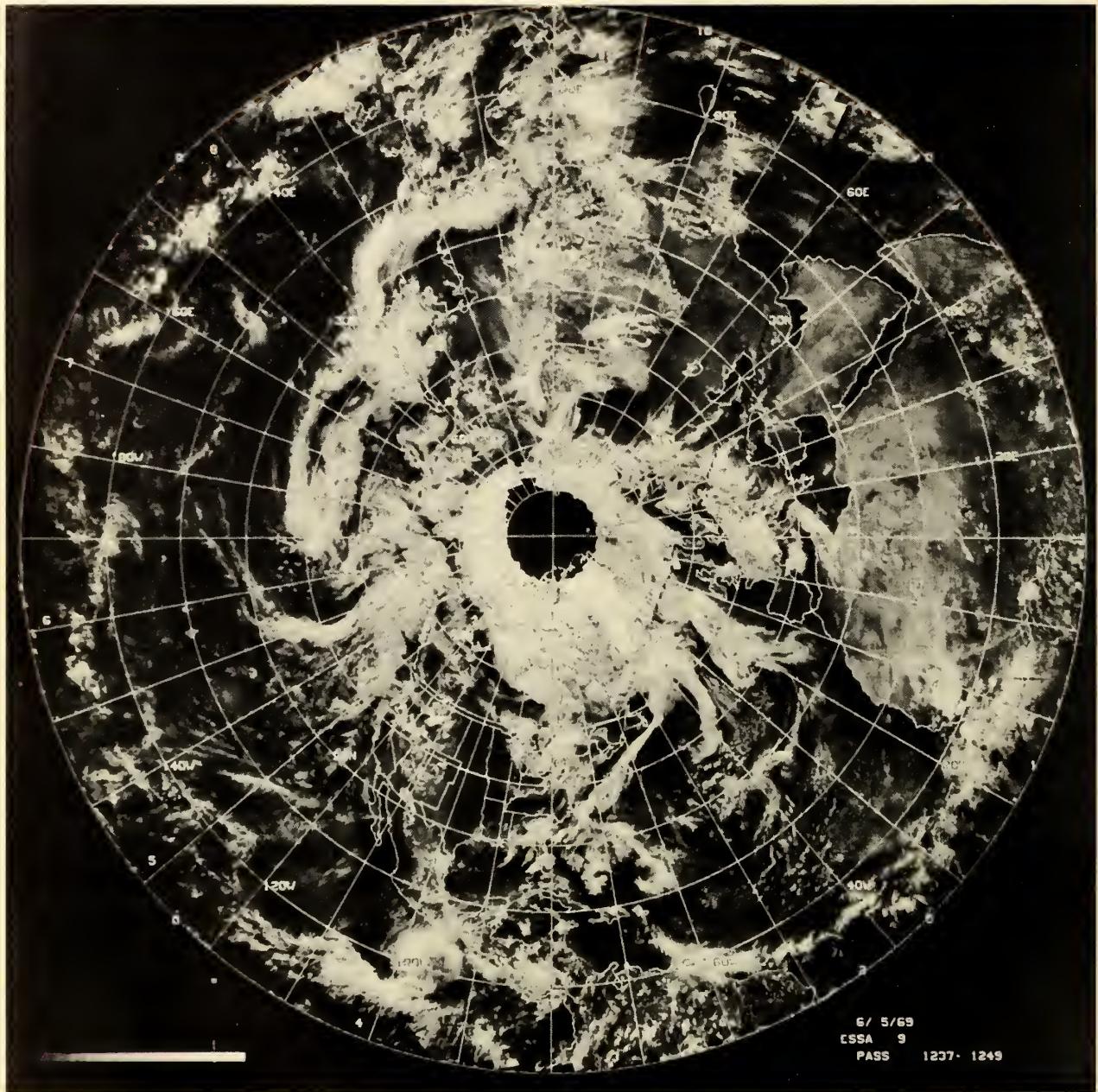
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ESSA 9
PASS 1200- 1212

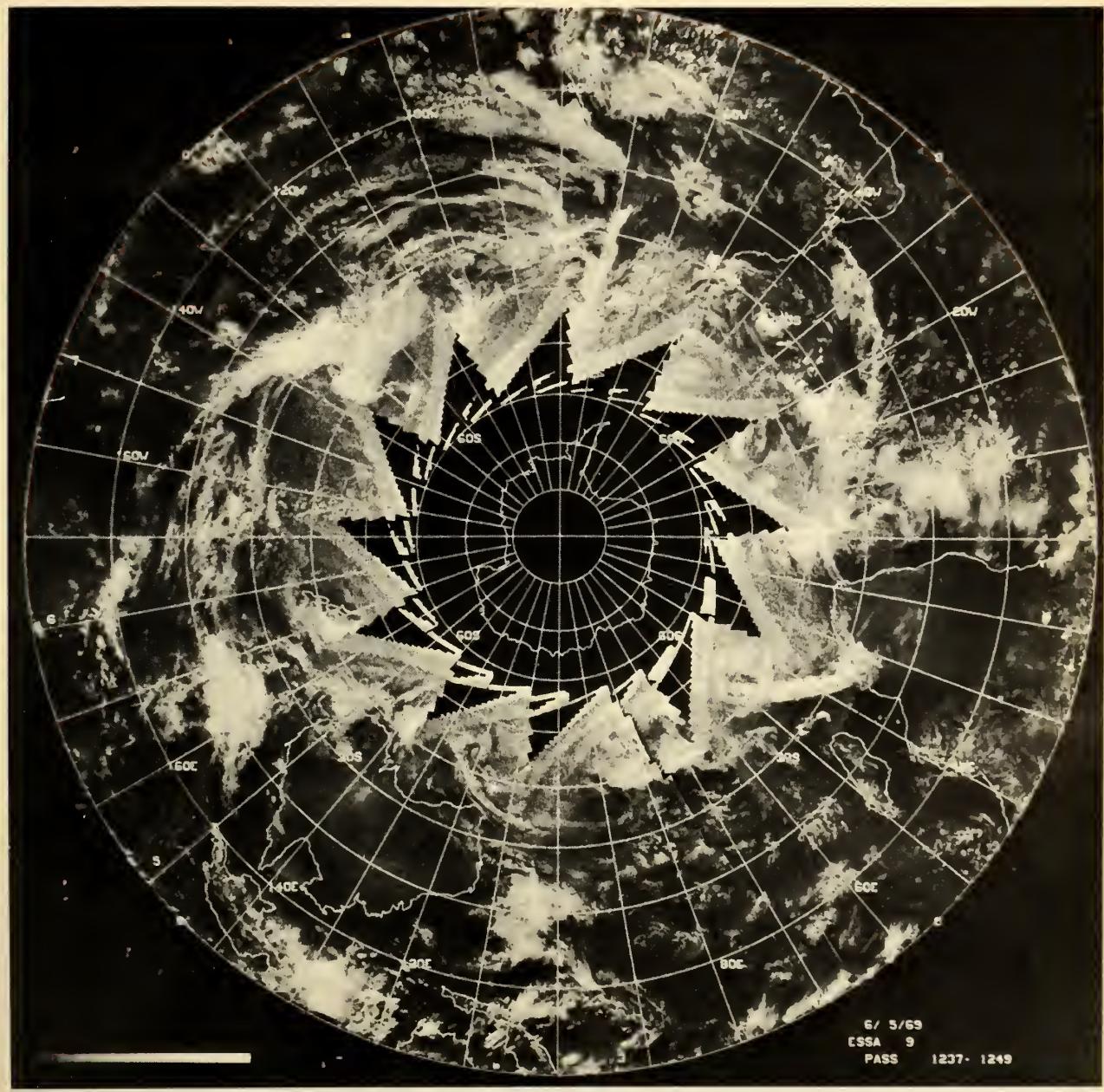




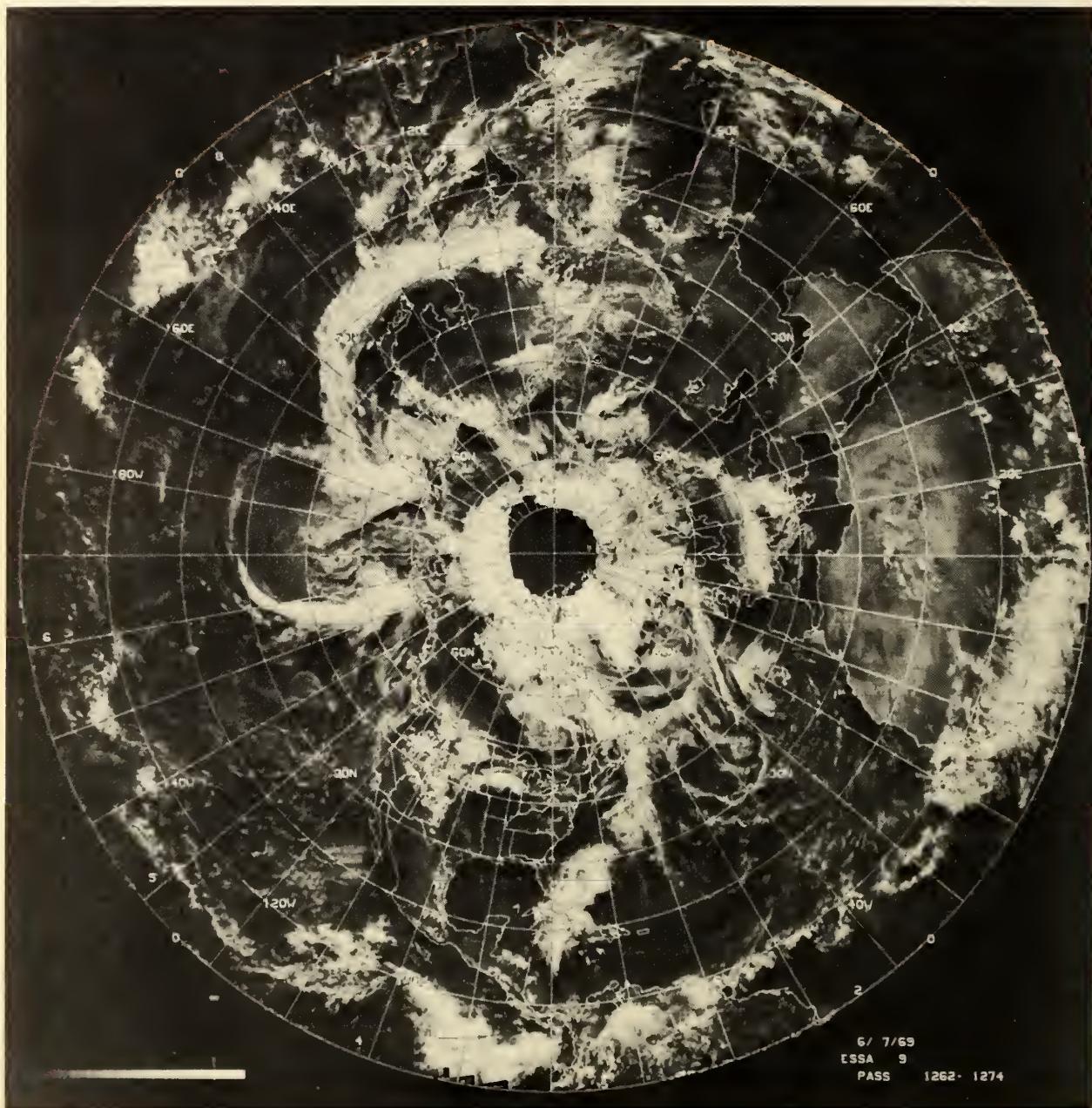


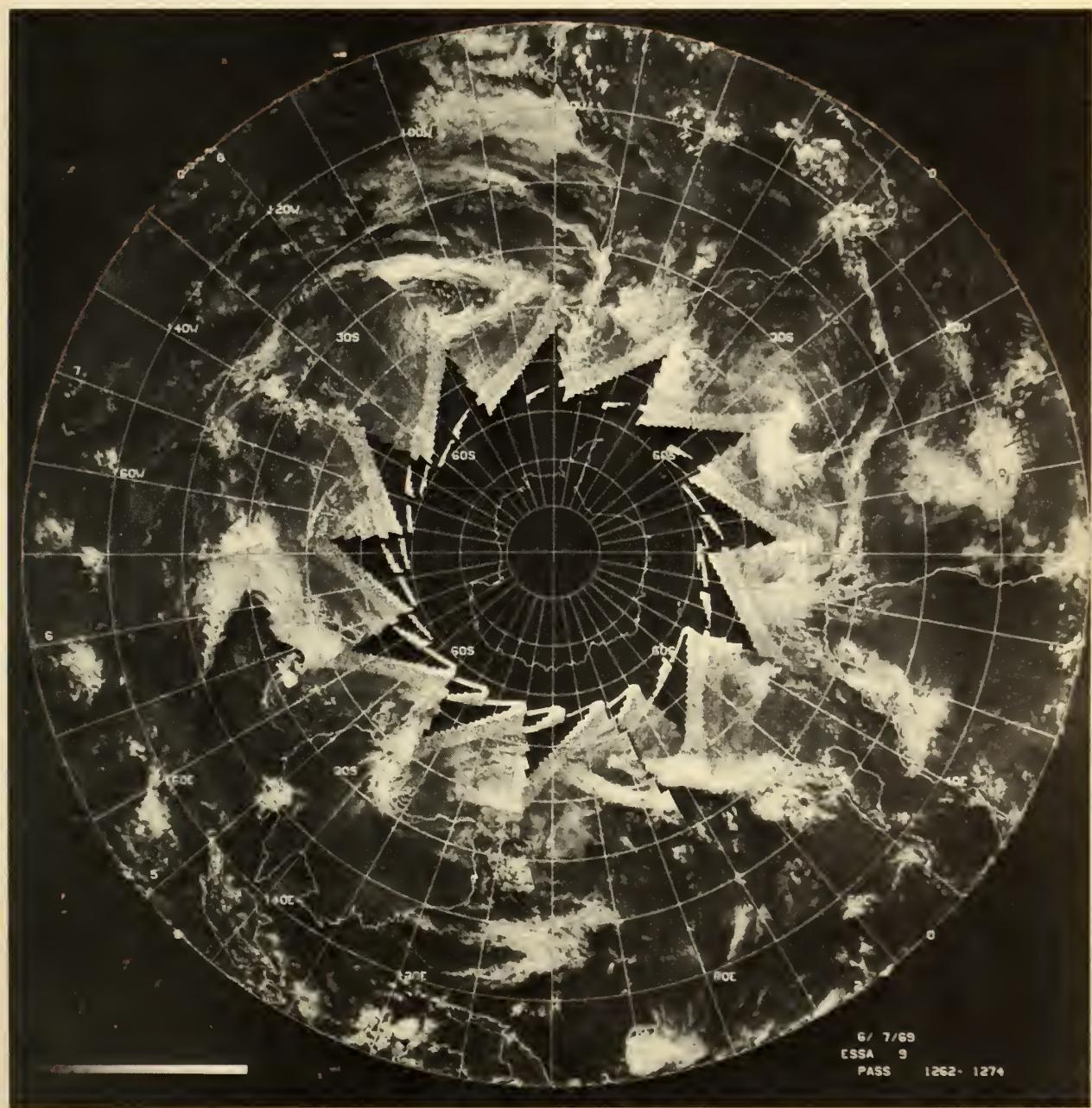


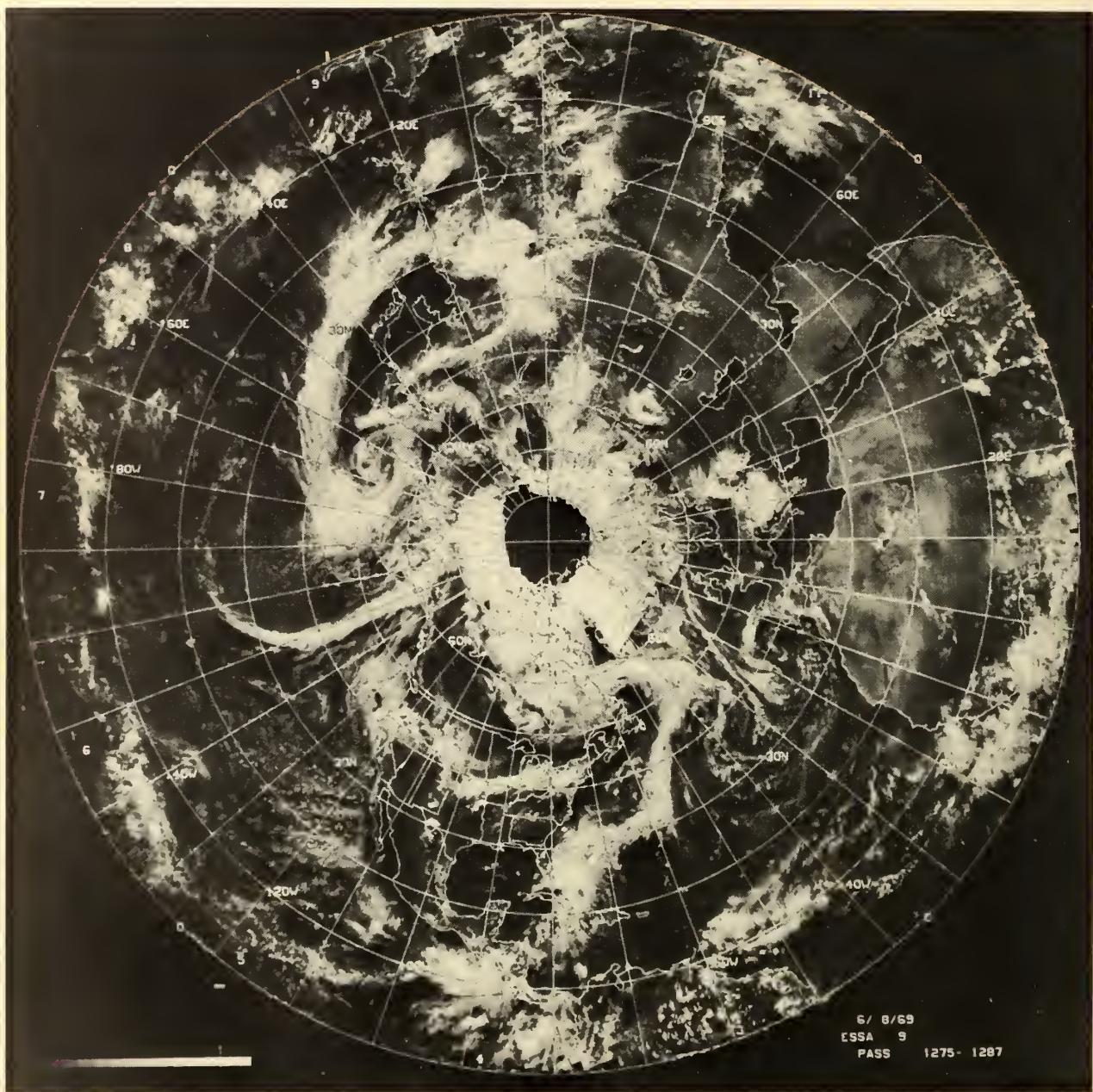


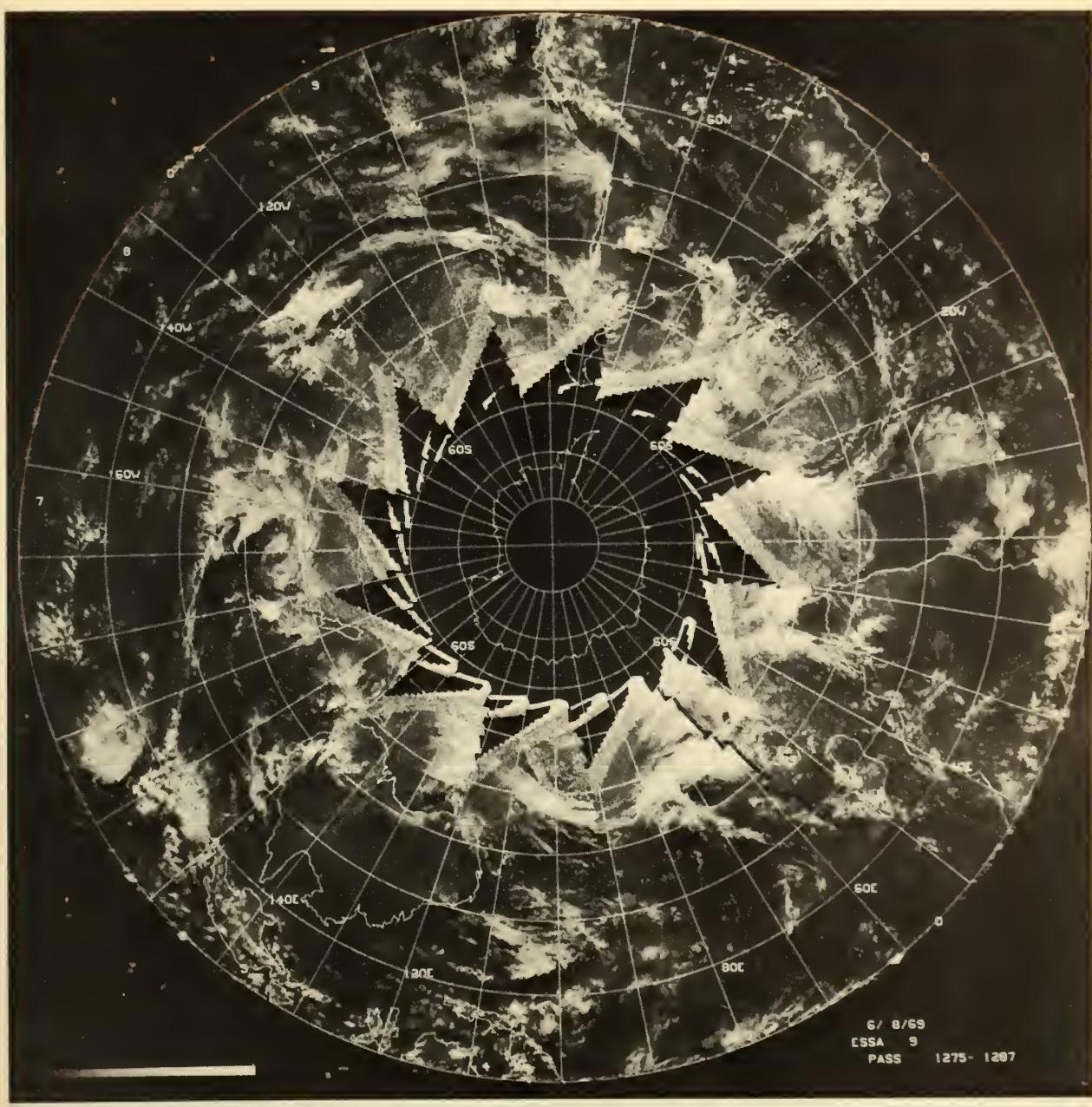


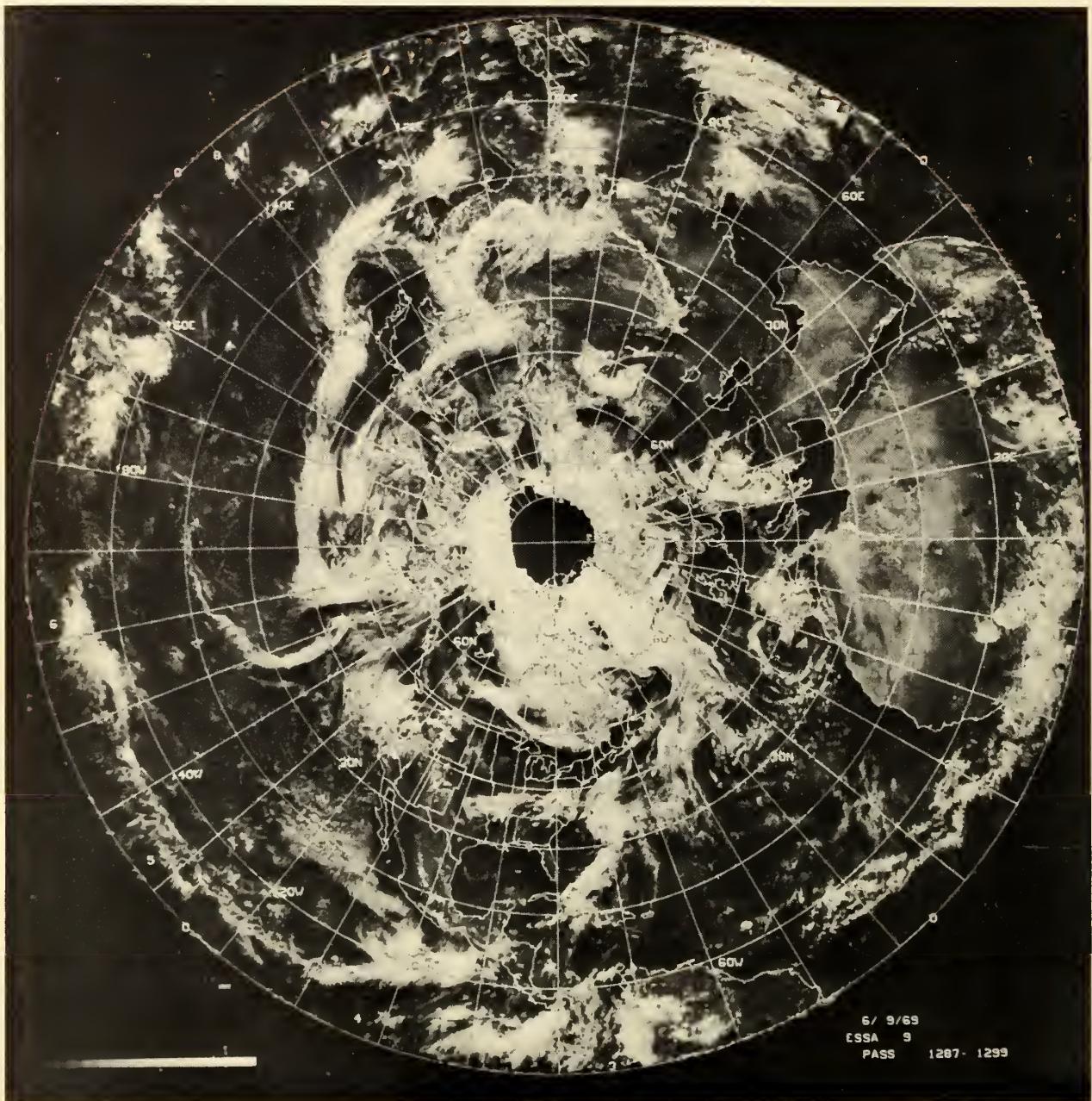
6/ 5/69
ESSA 9
PASS 1237- 1249

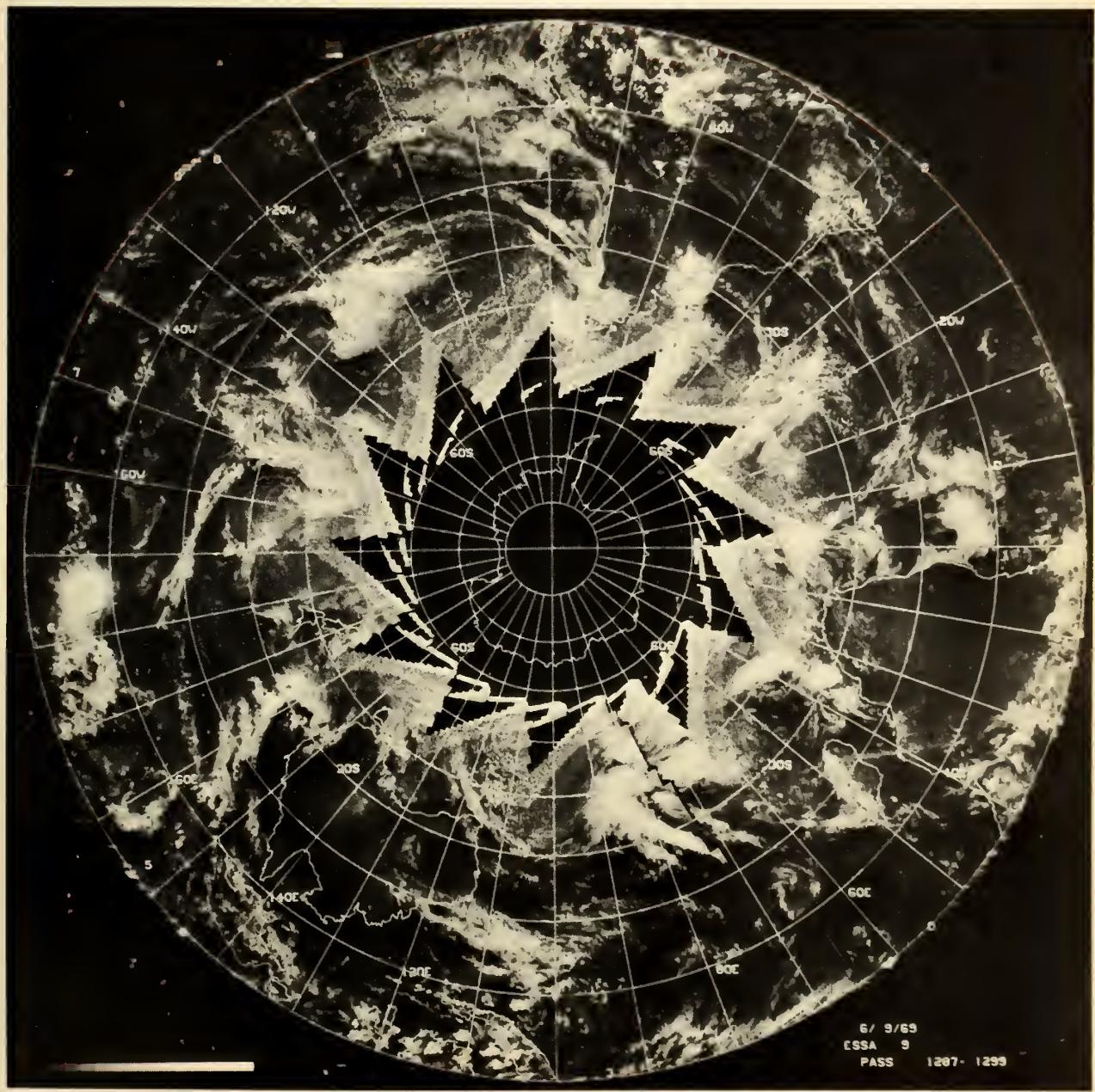


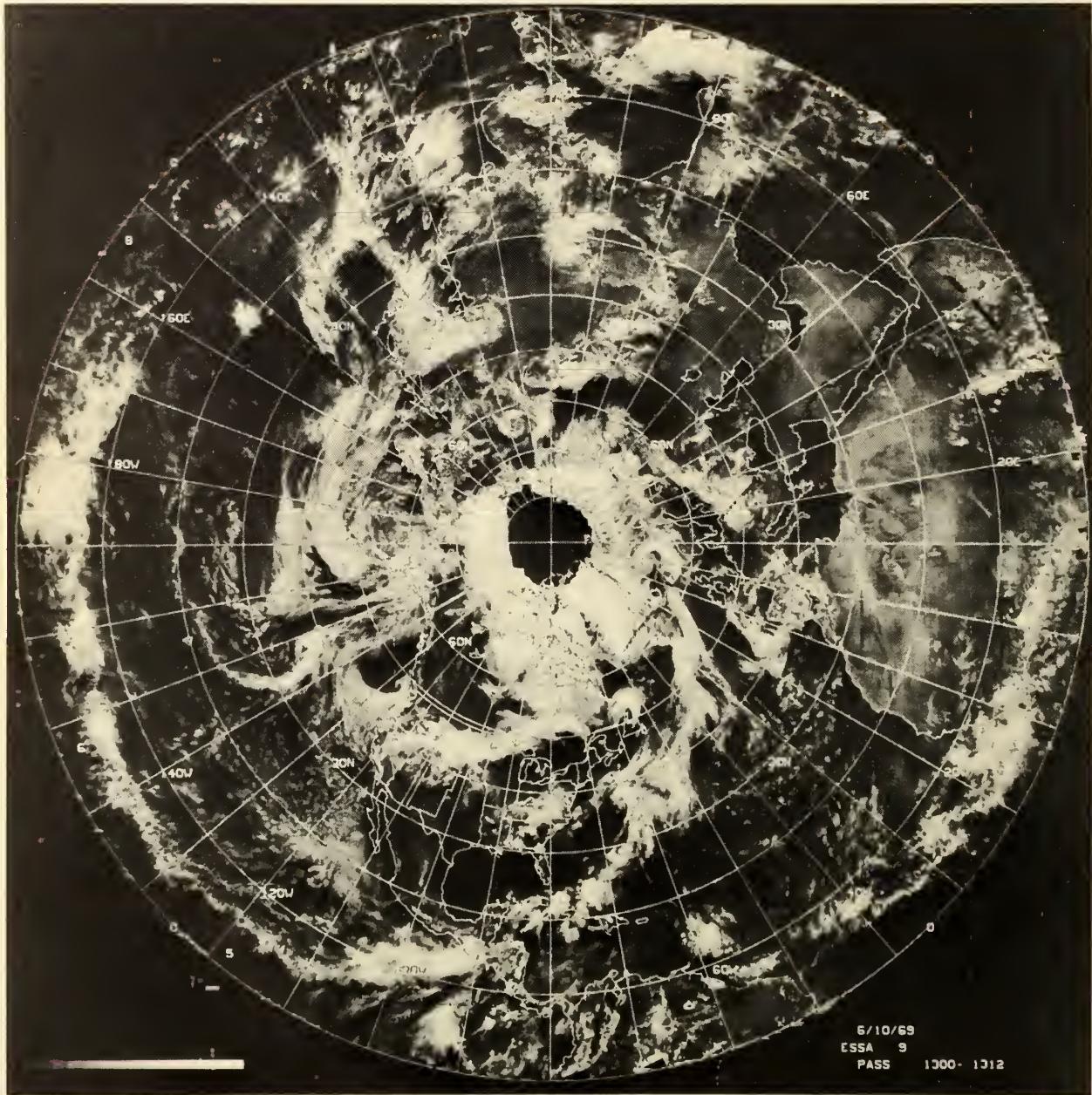


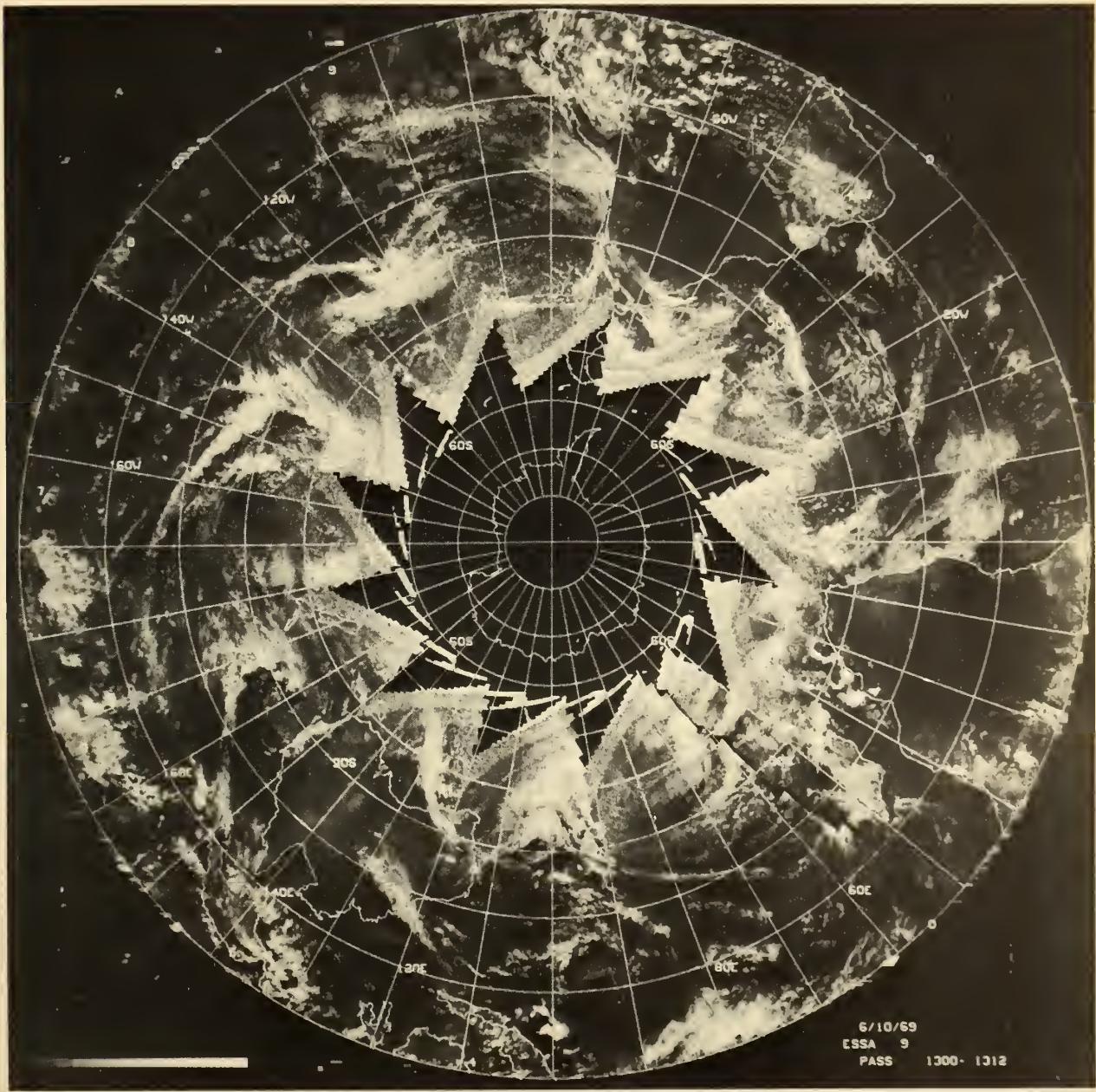


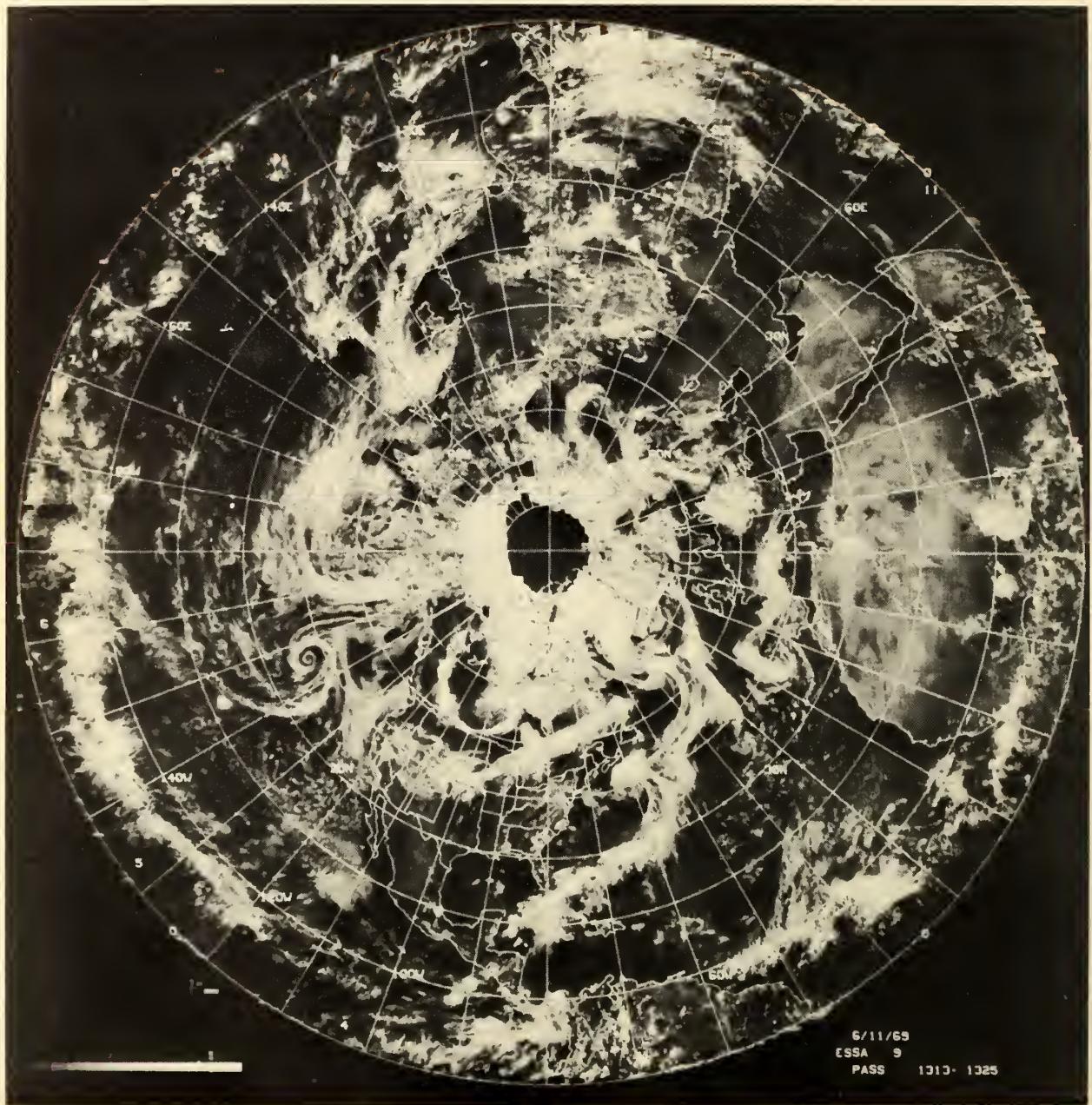


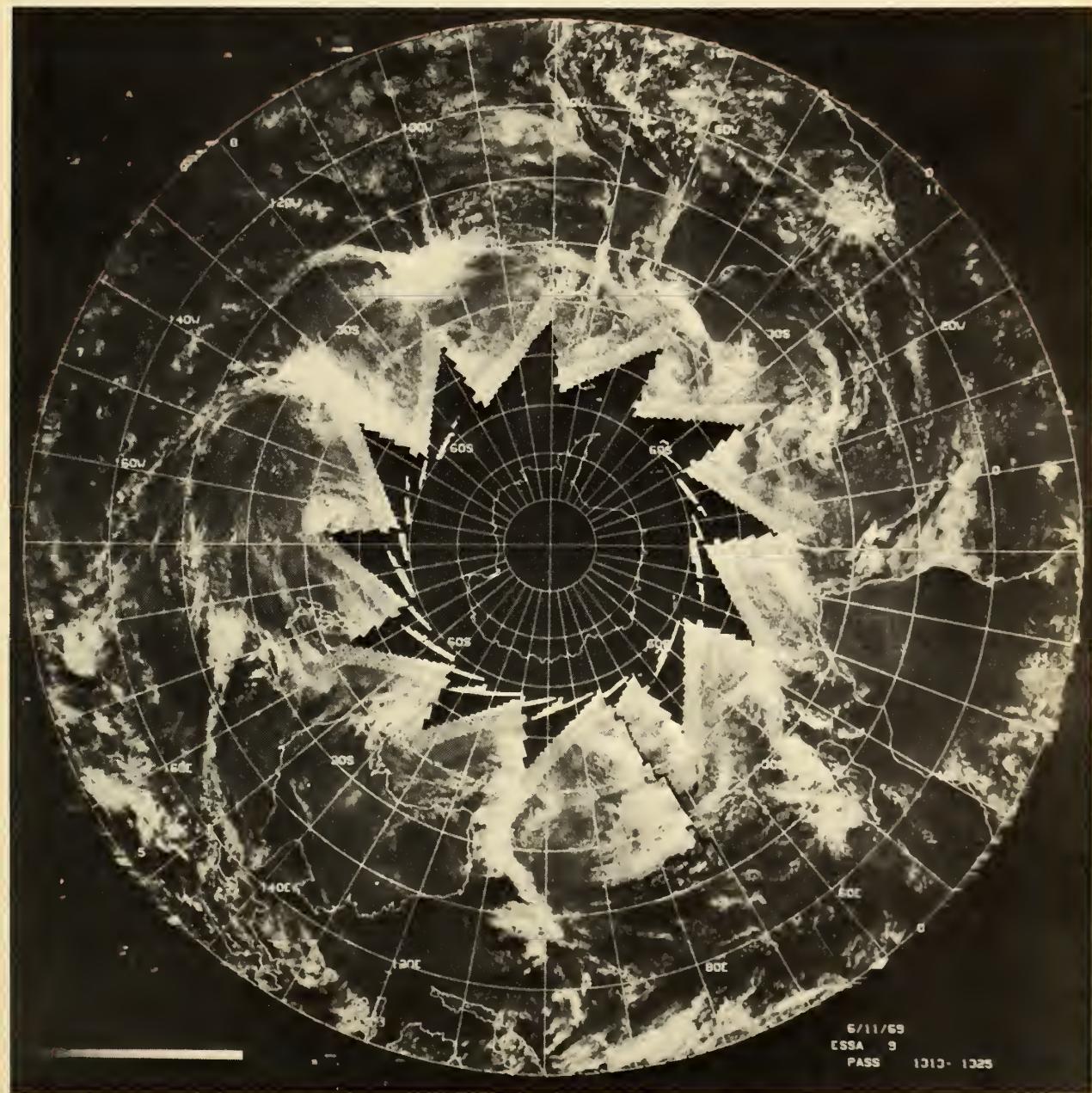


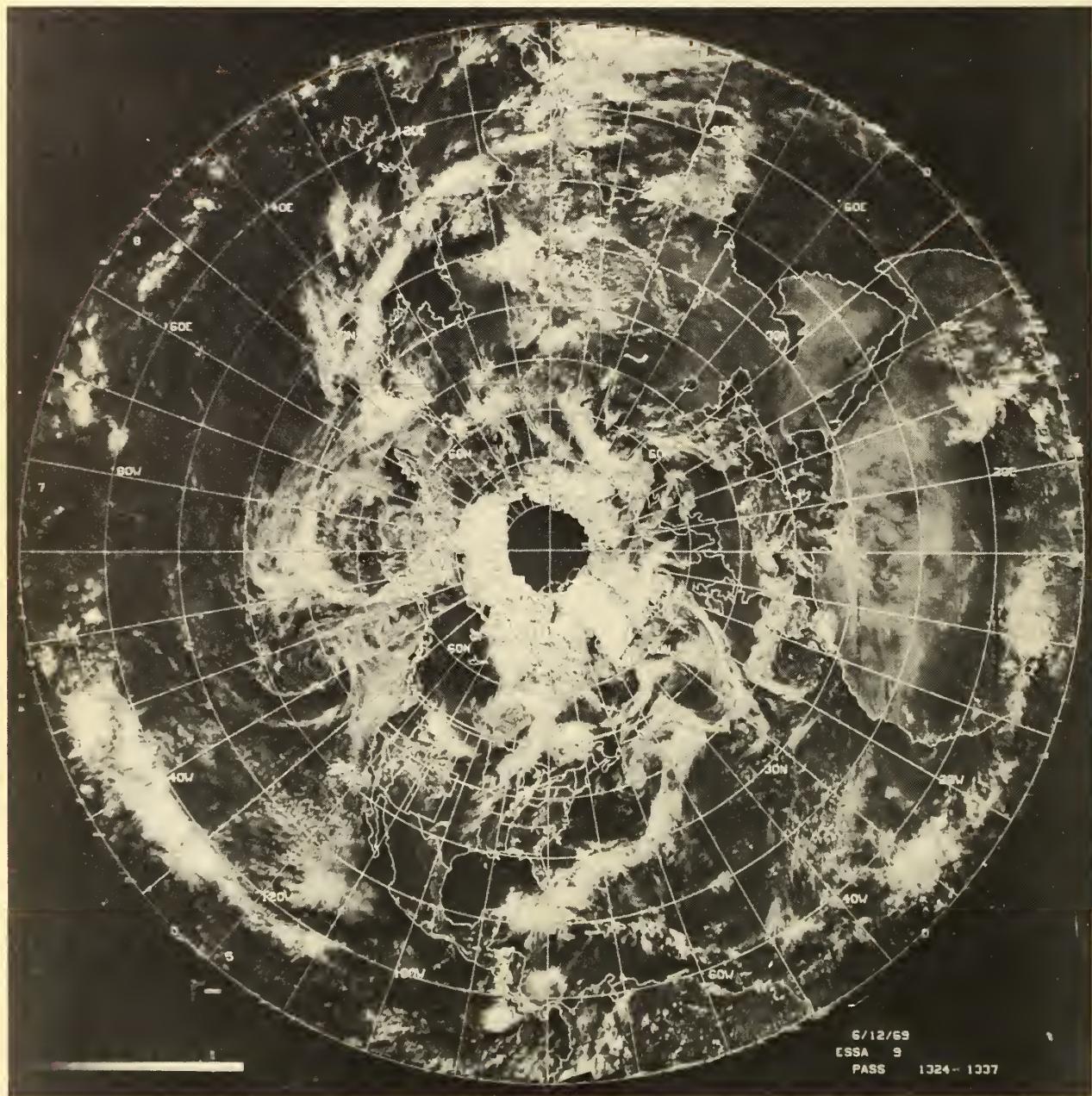


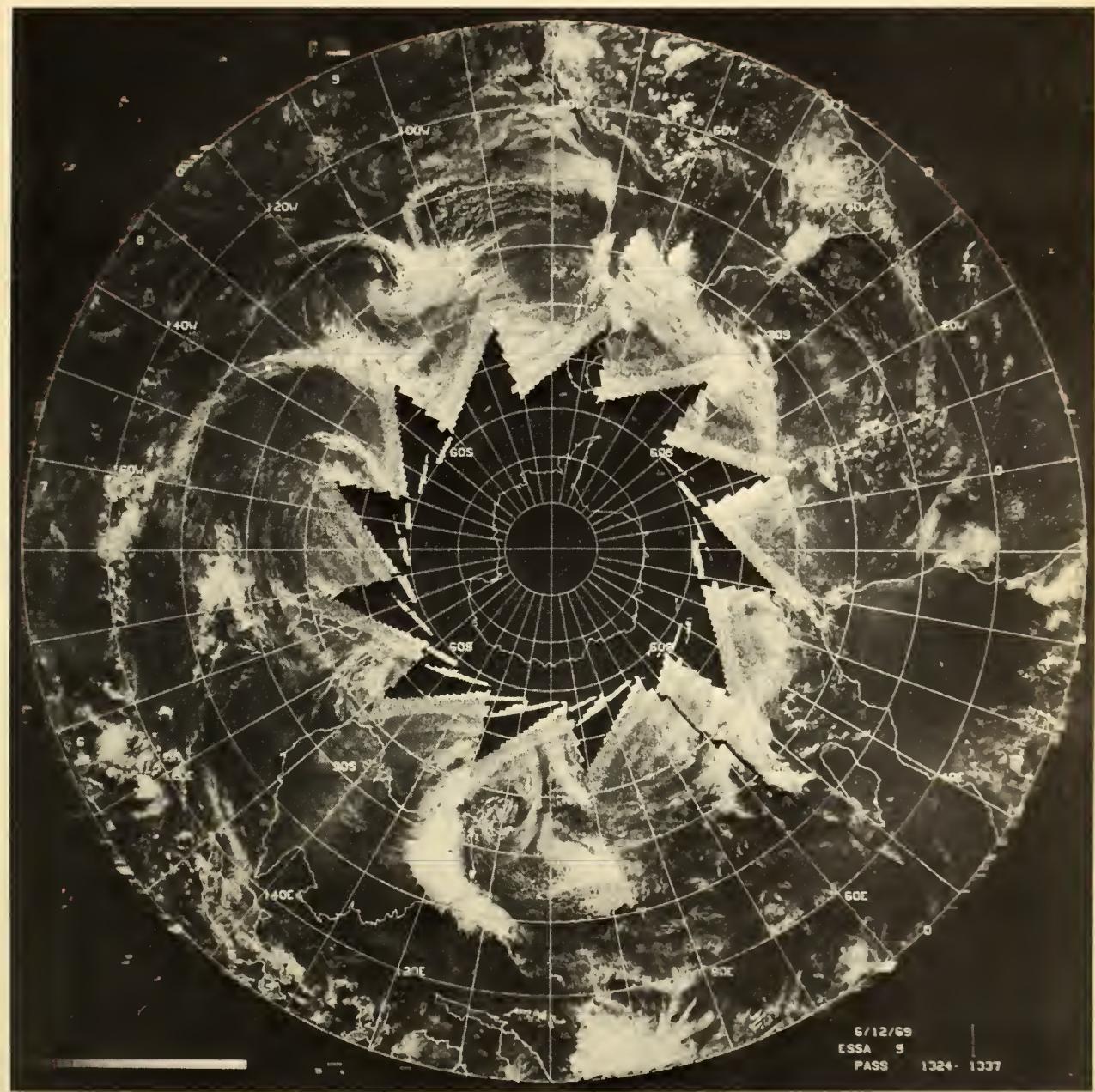




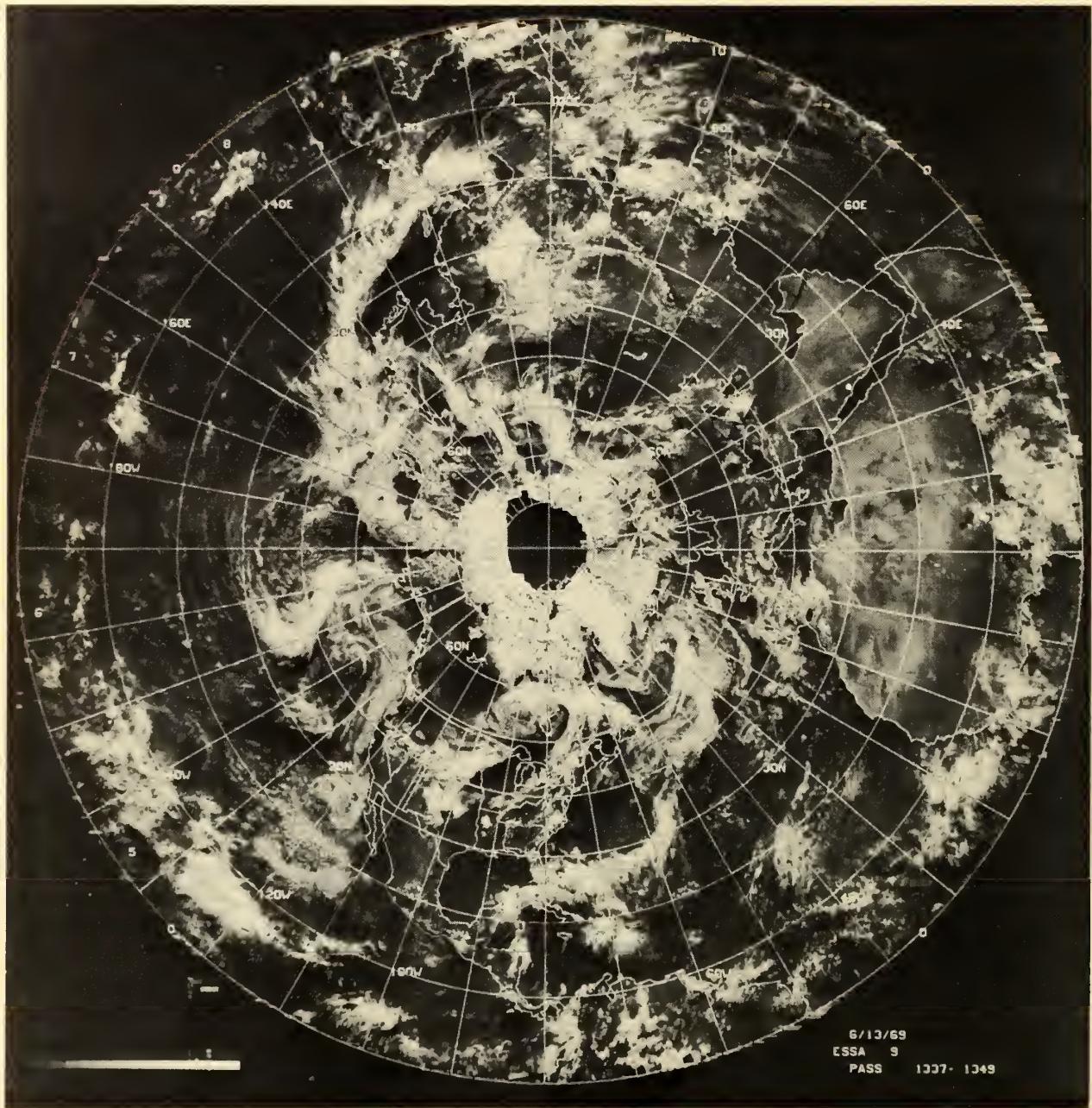


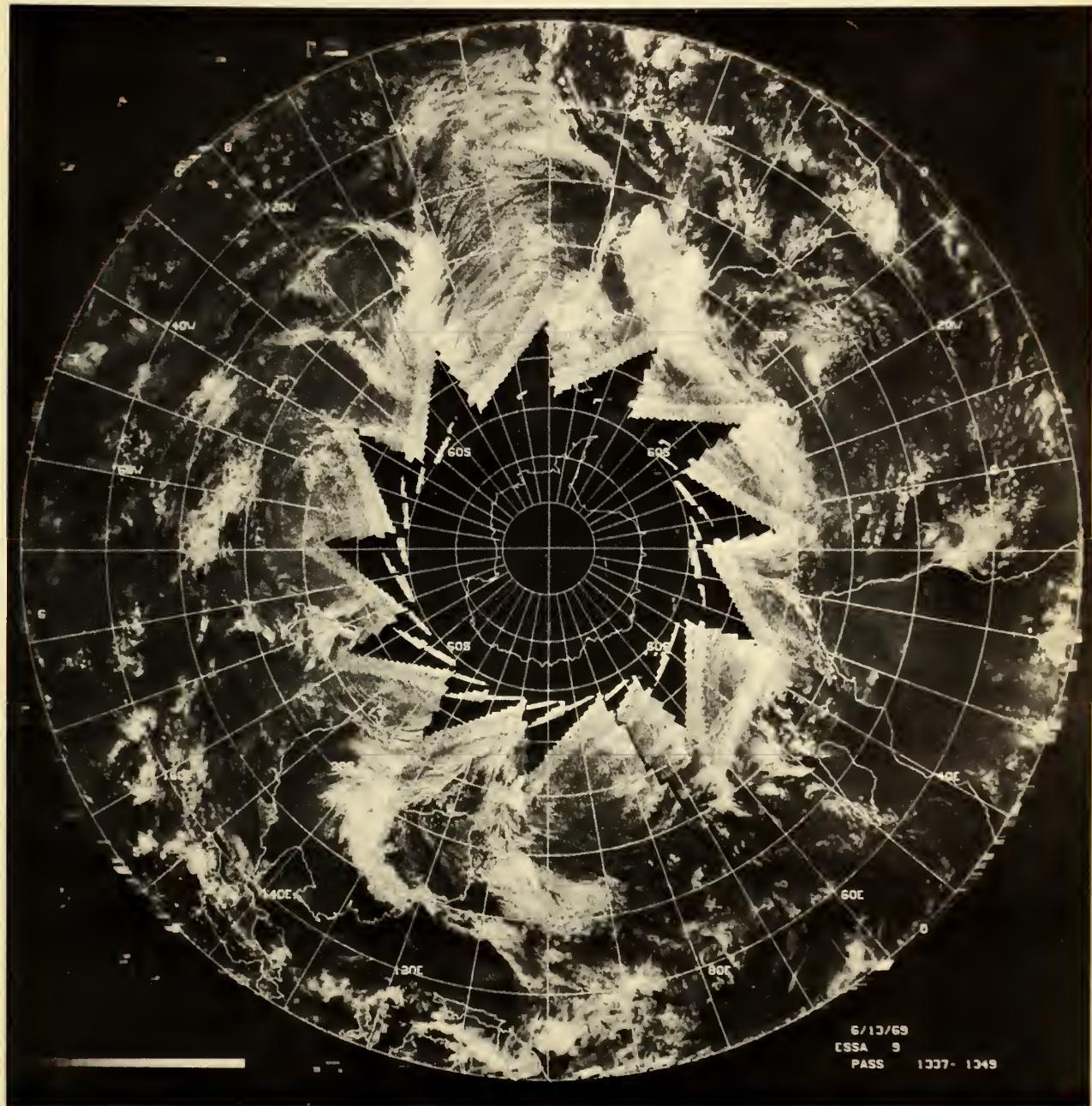


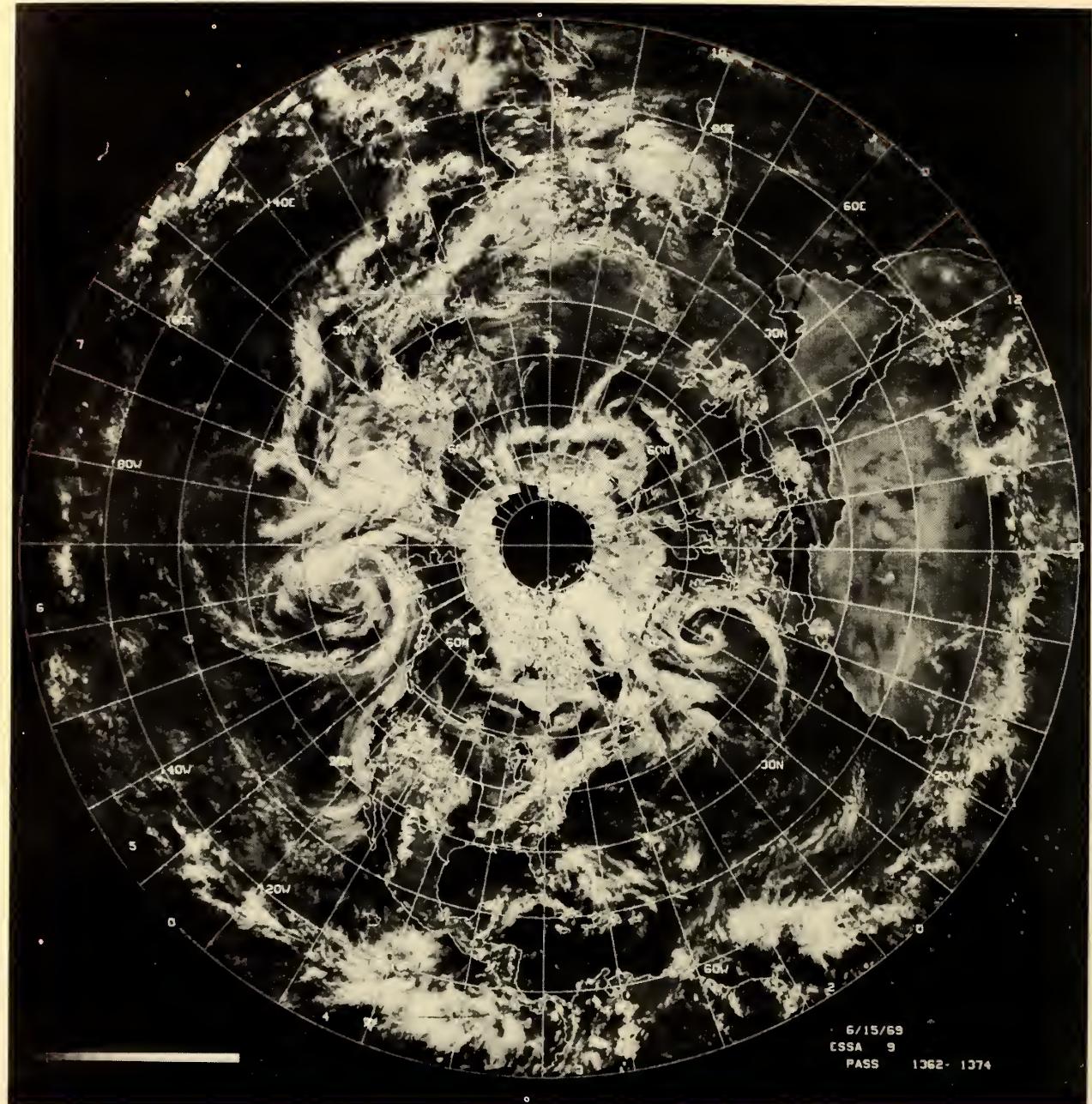


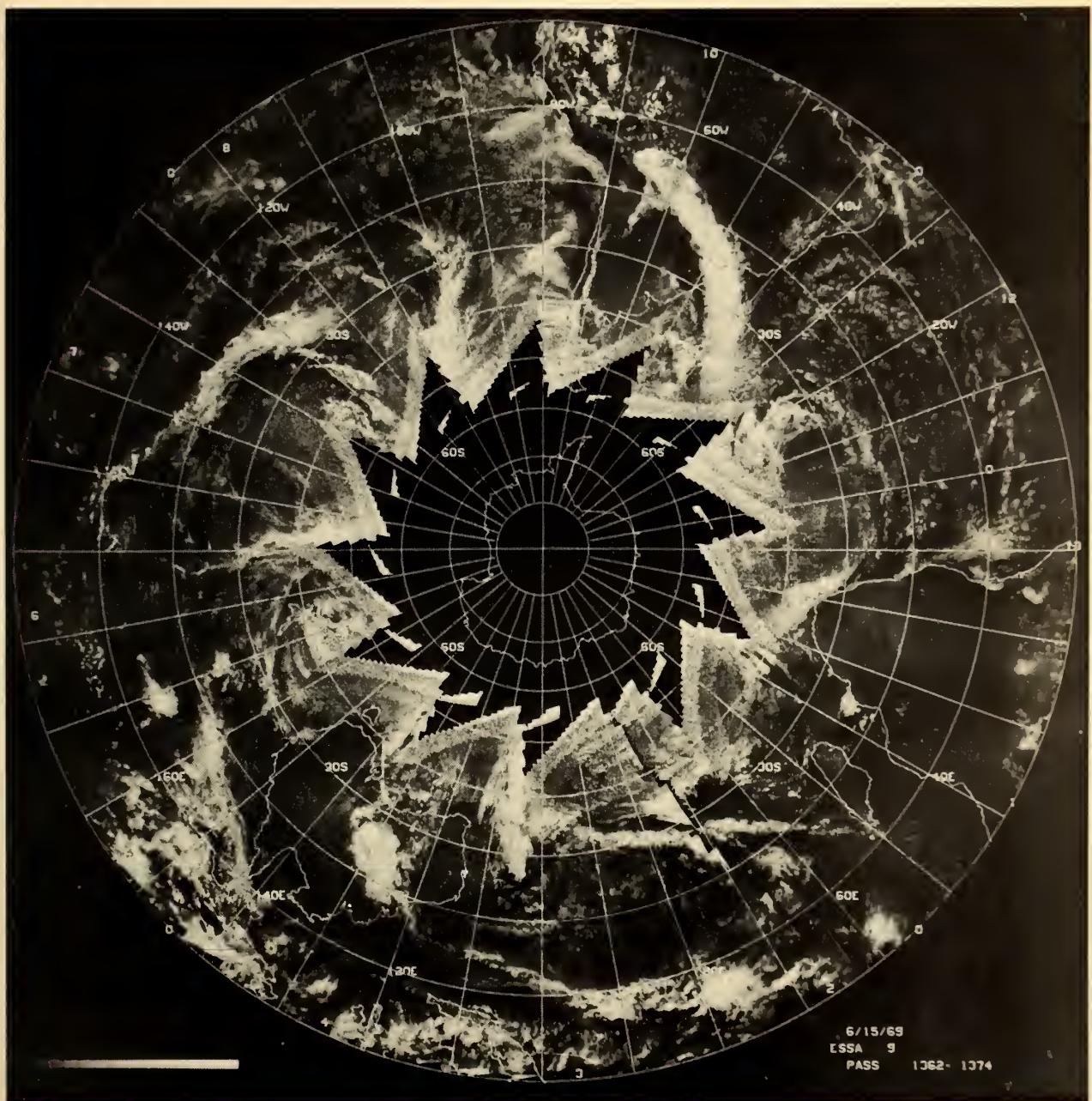


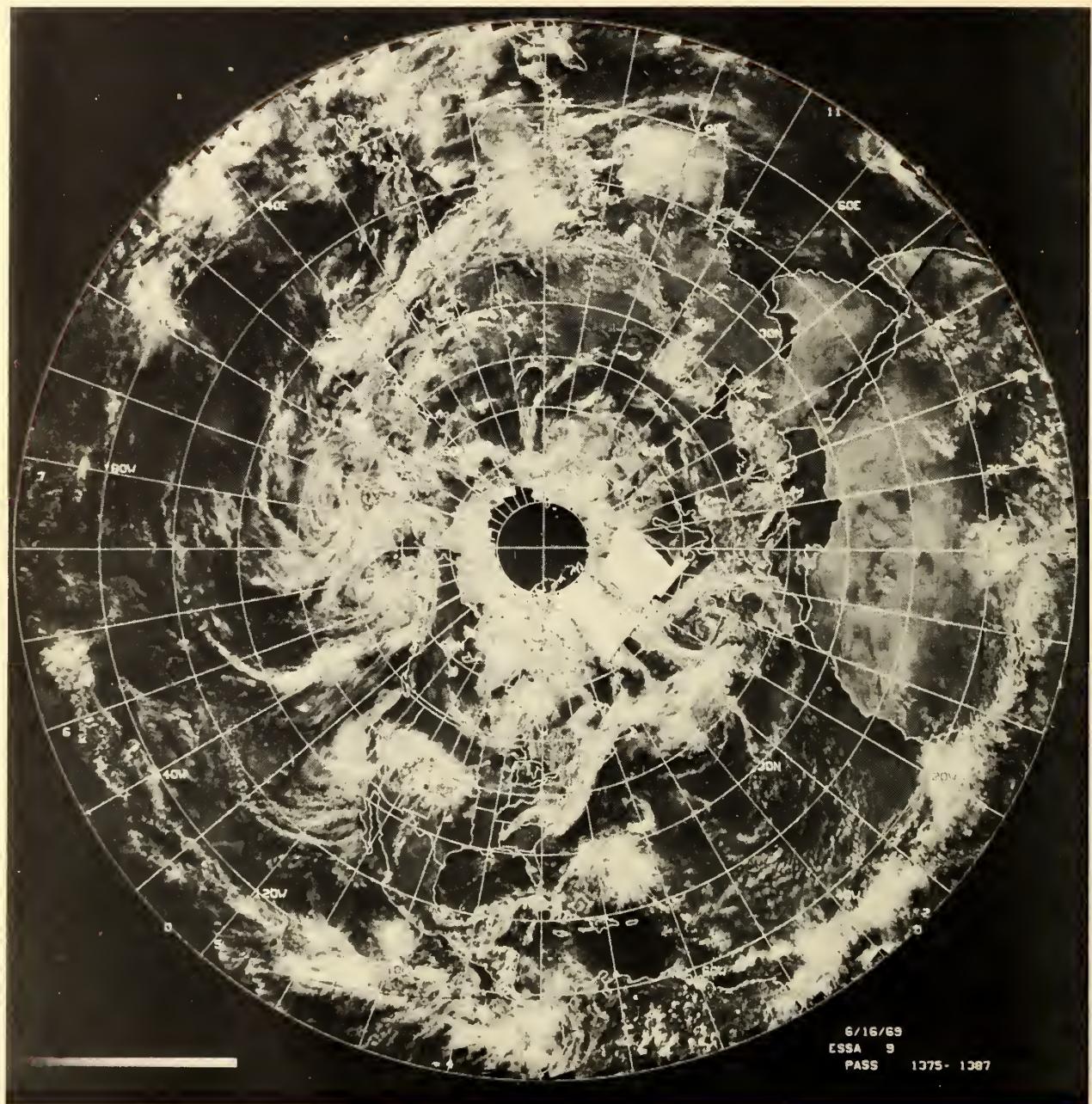
6/12/69
ESSA 9
PASS 1324-1337

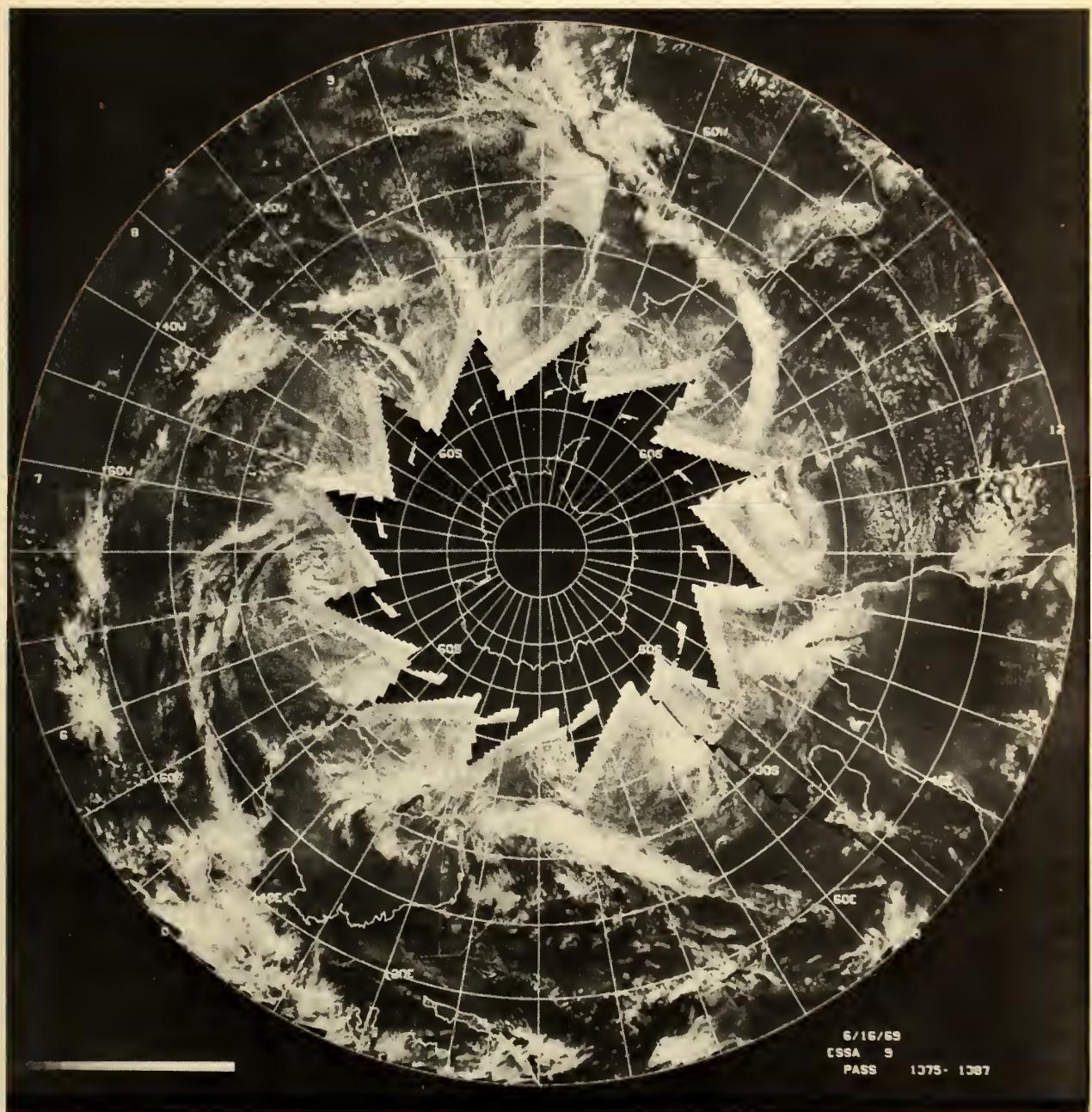


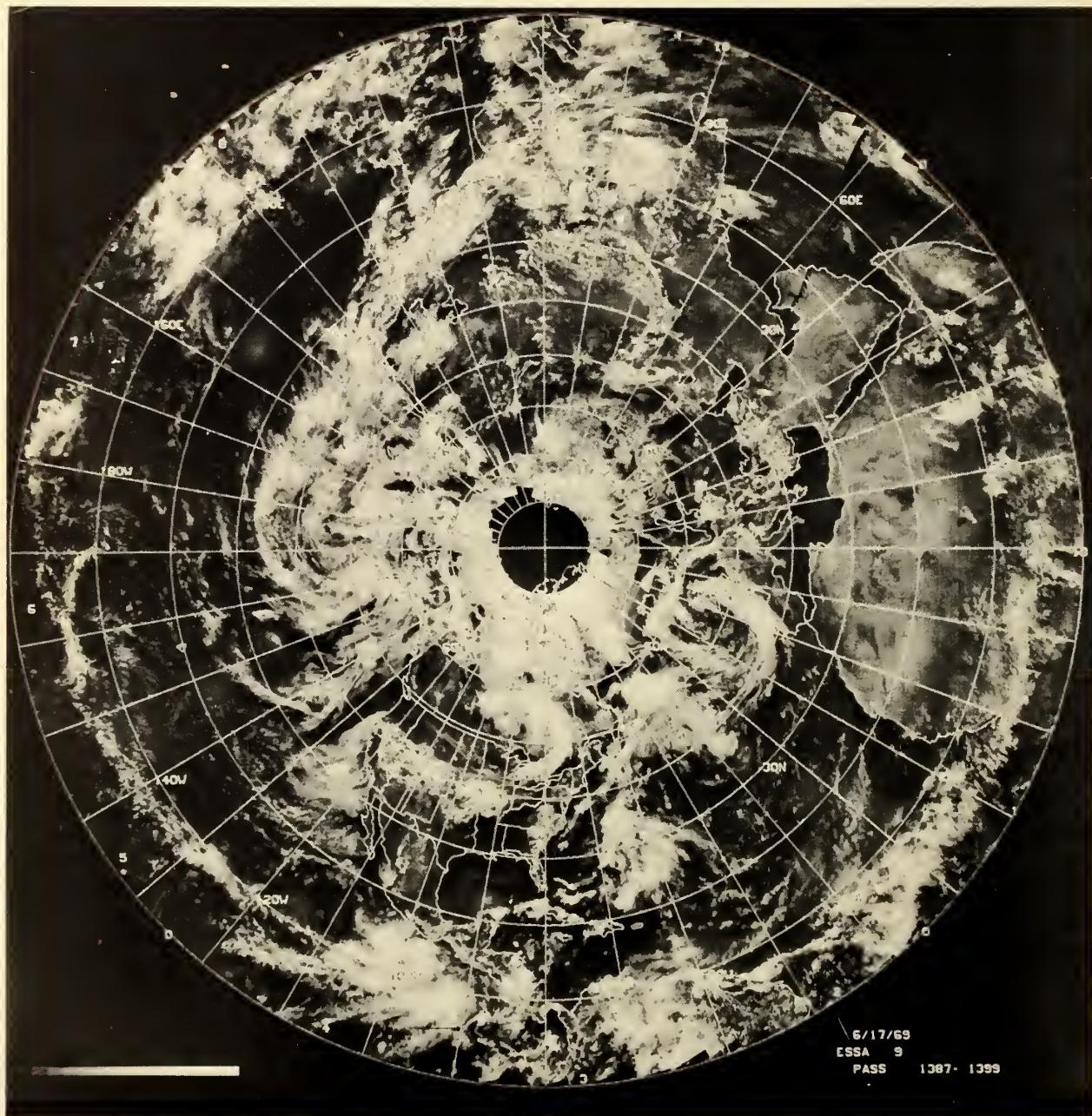


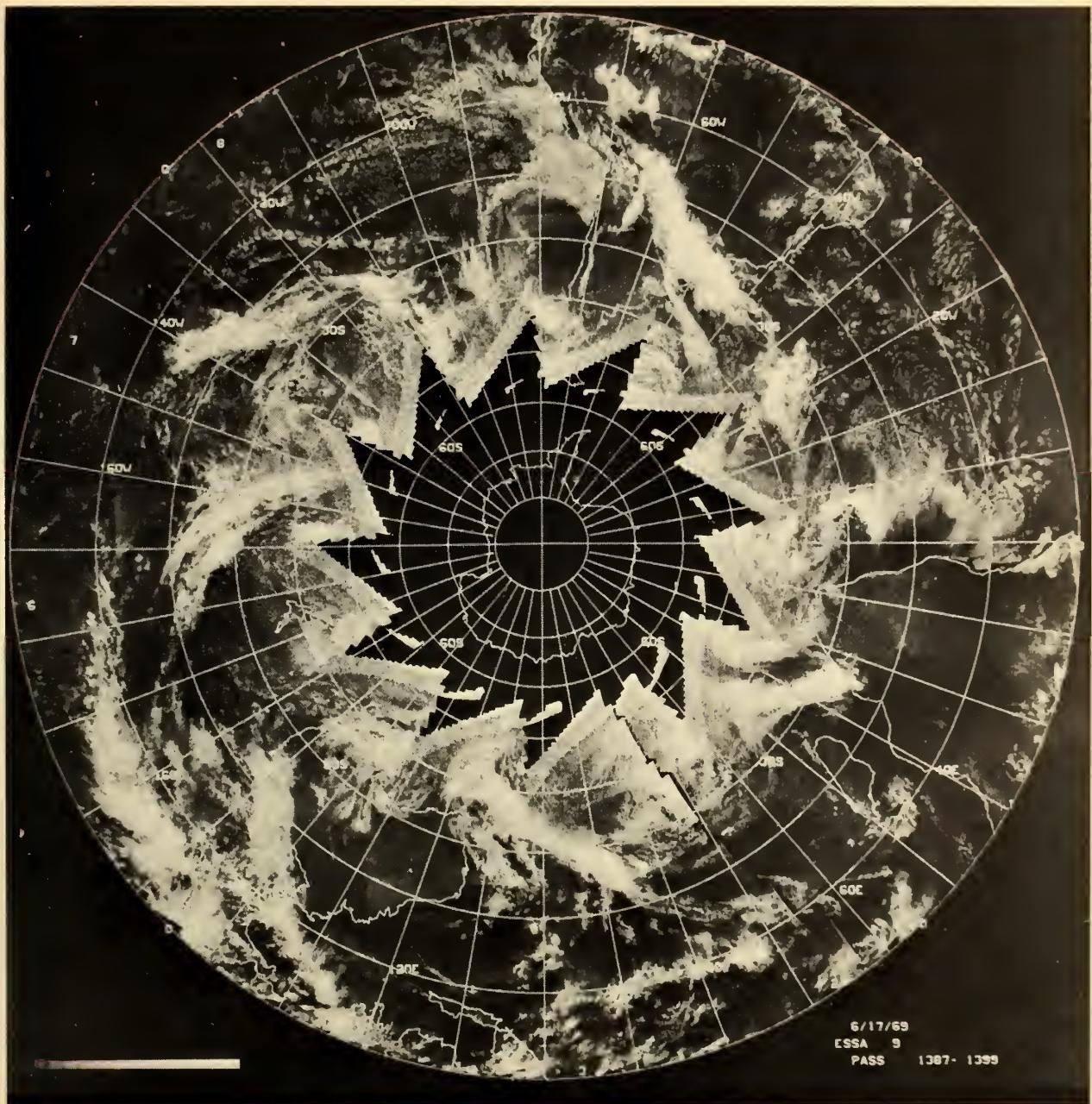


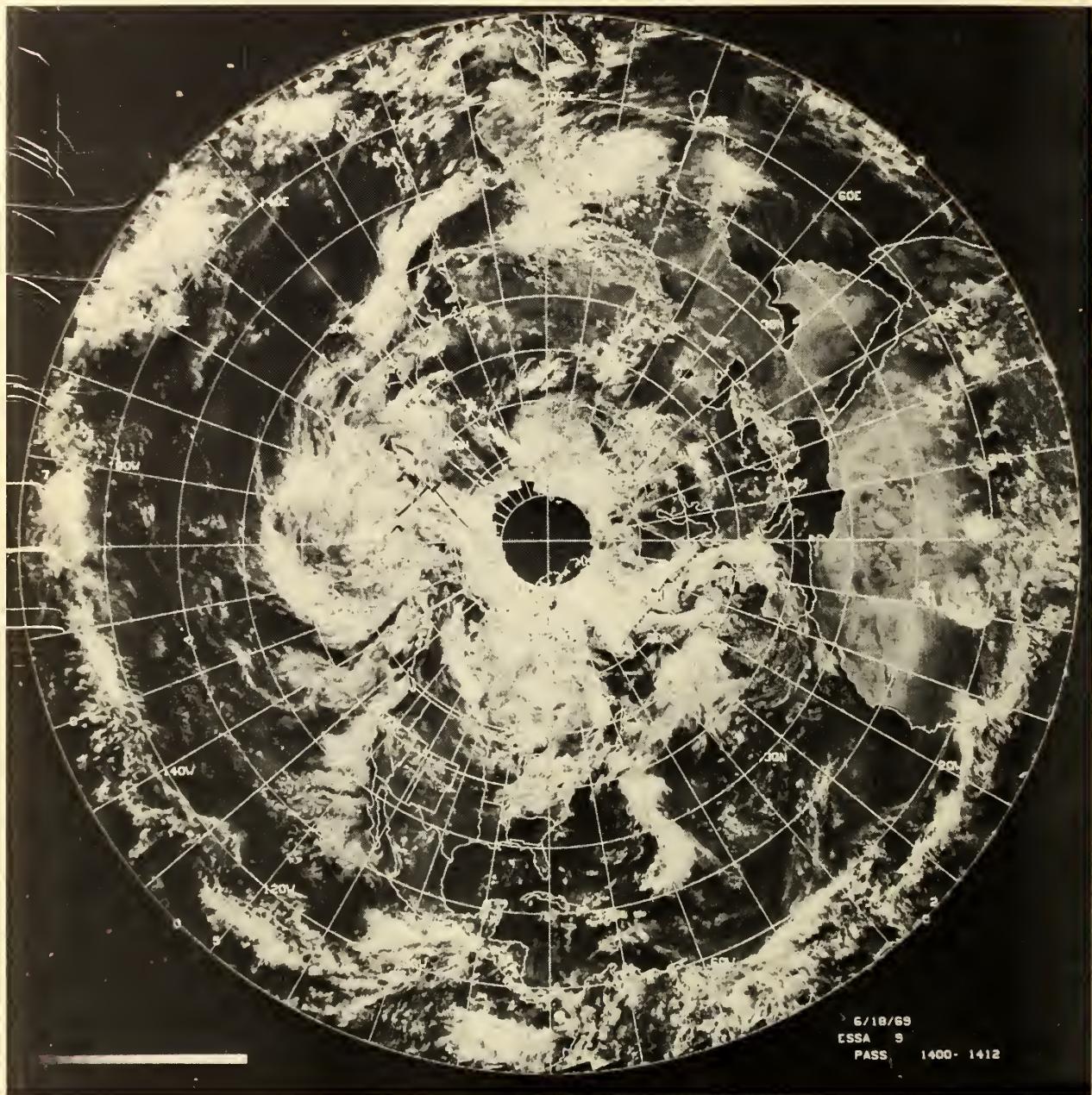


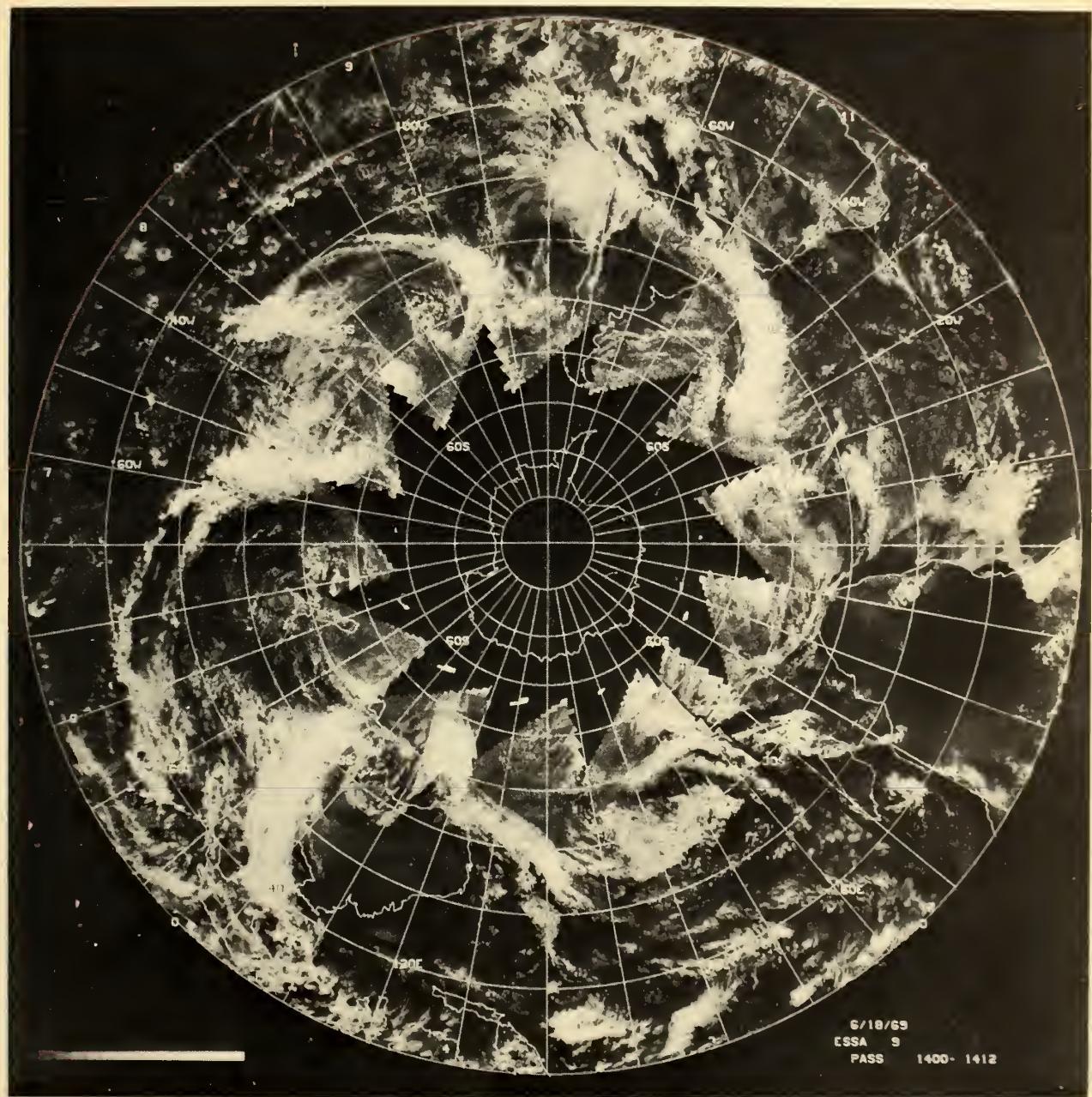


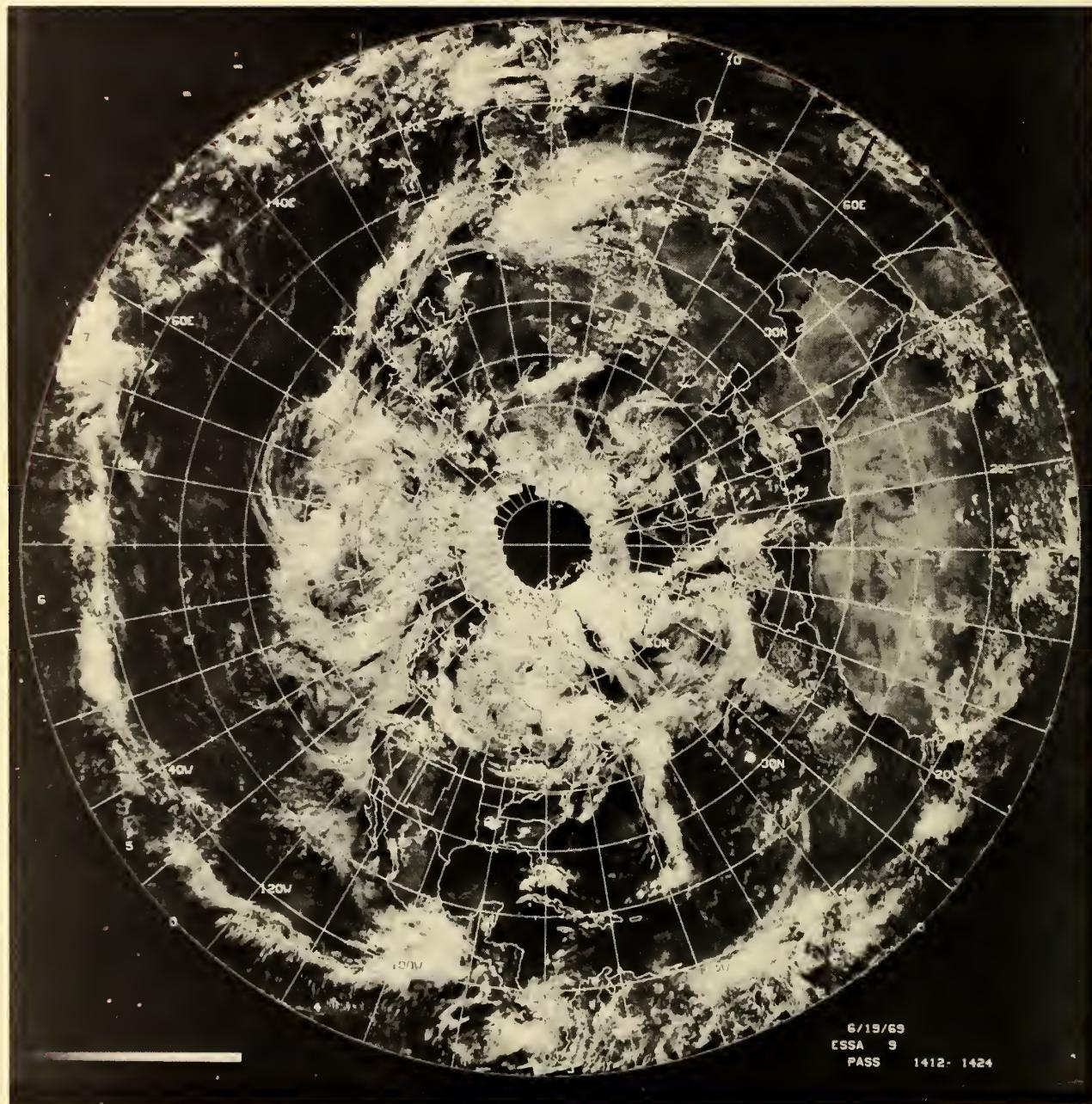


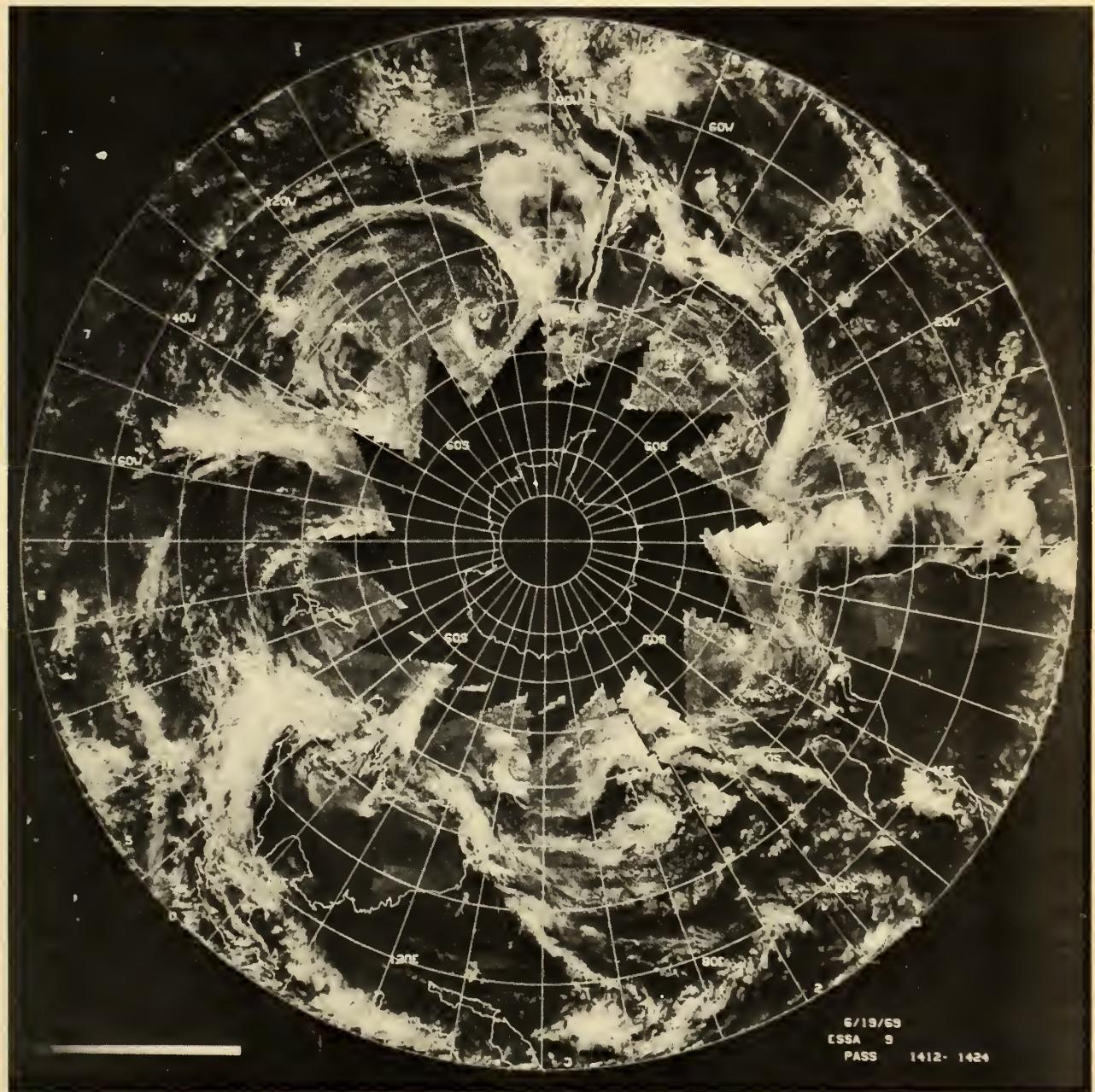


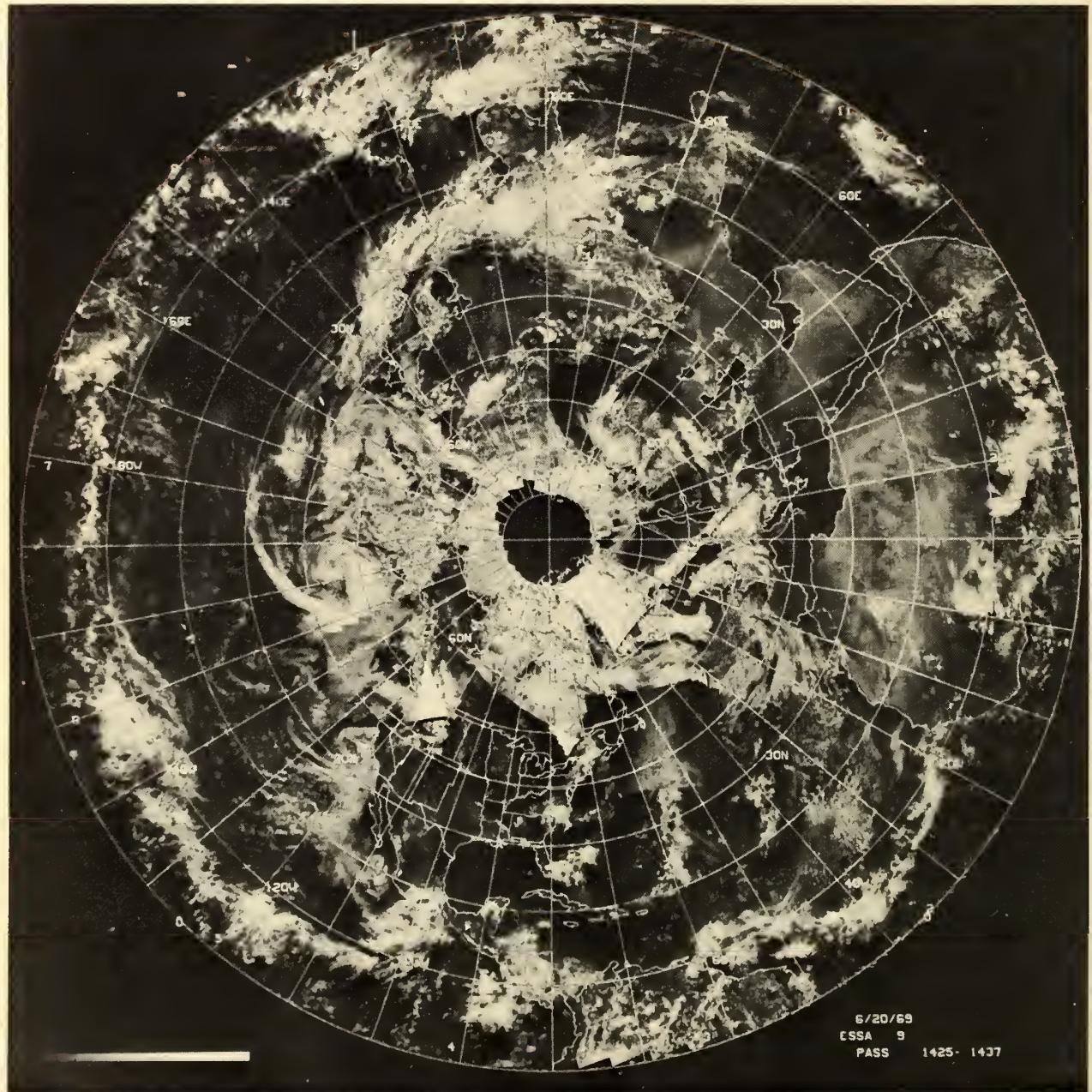


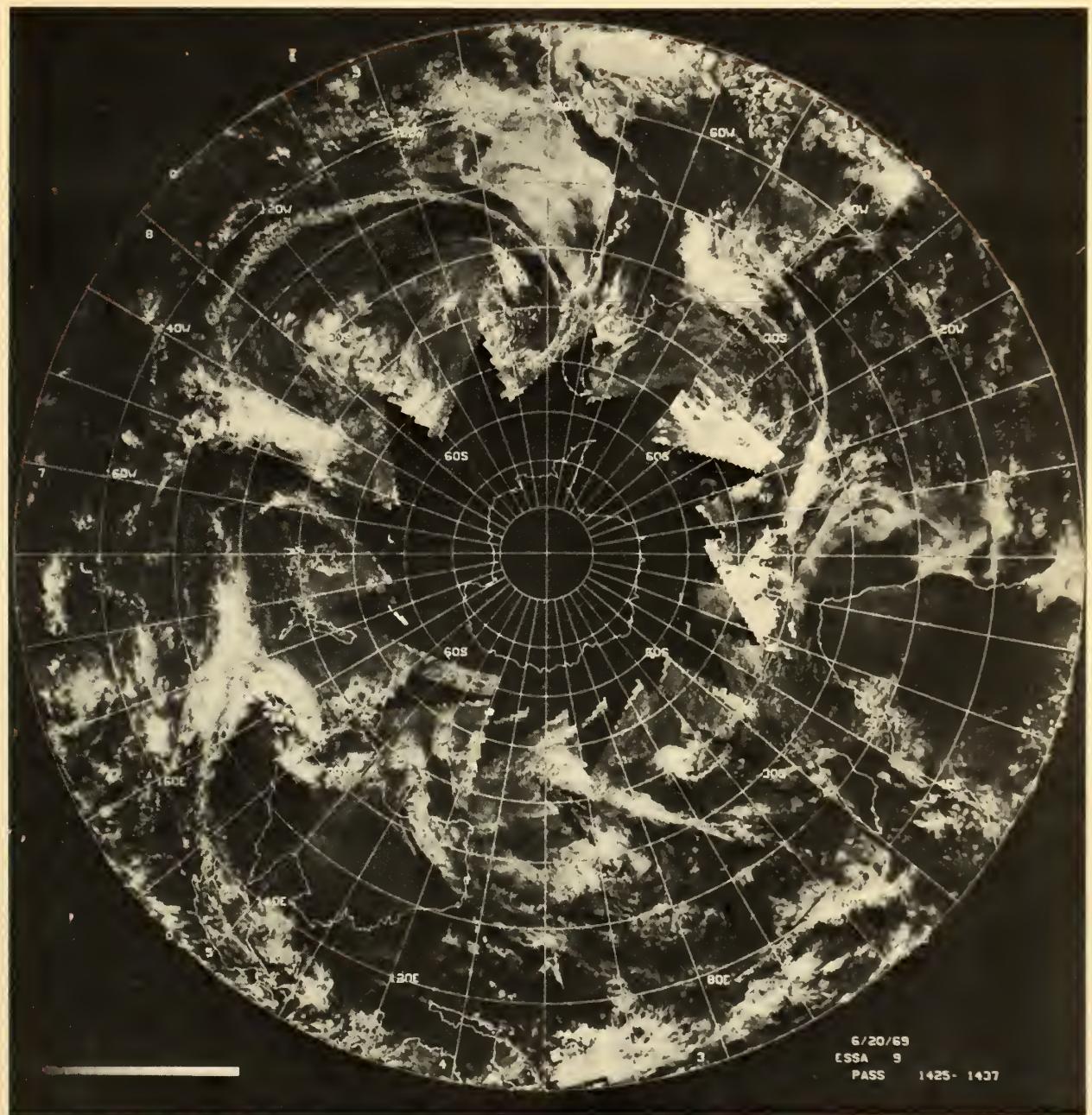


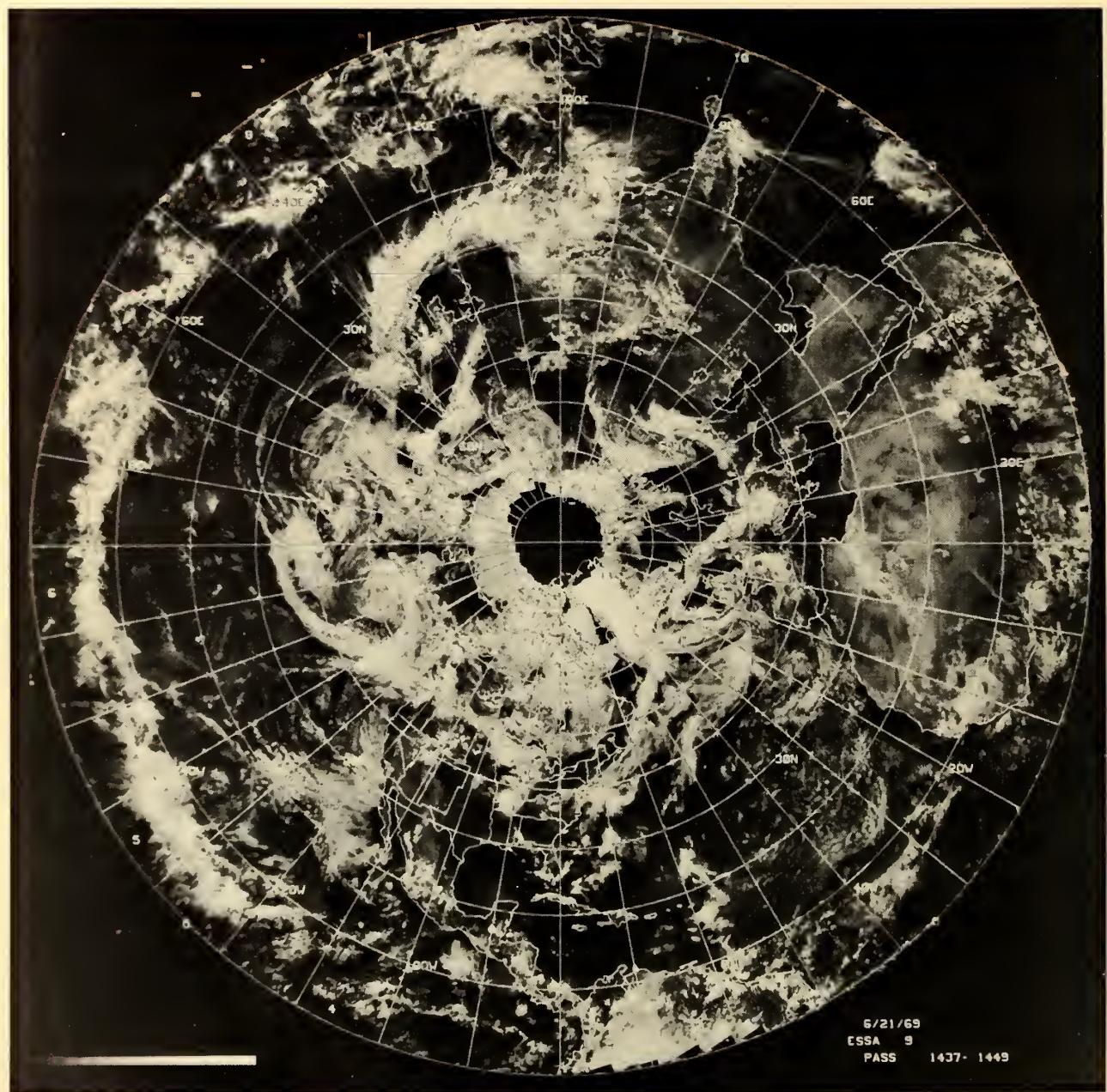


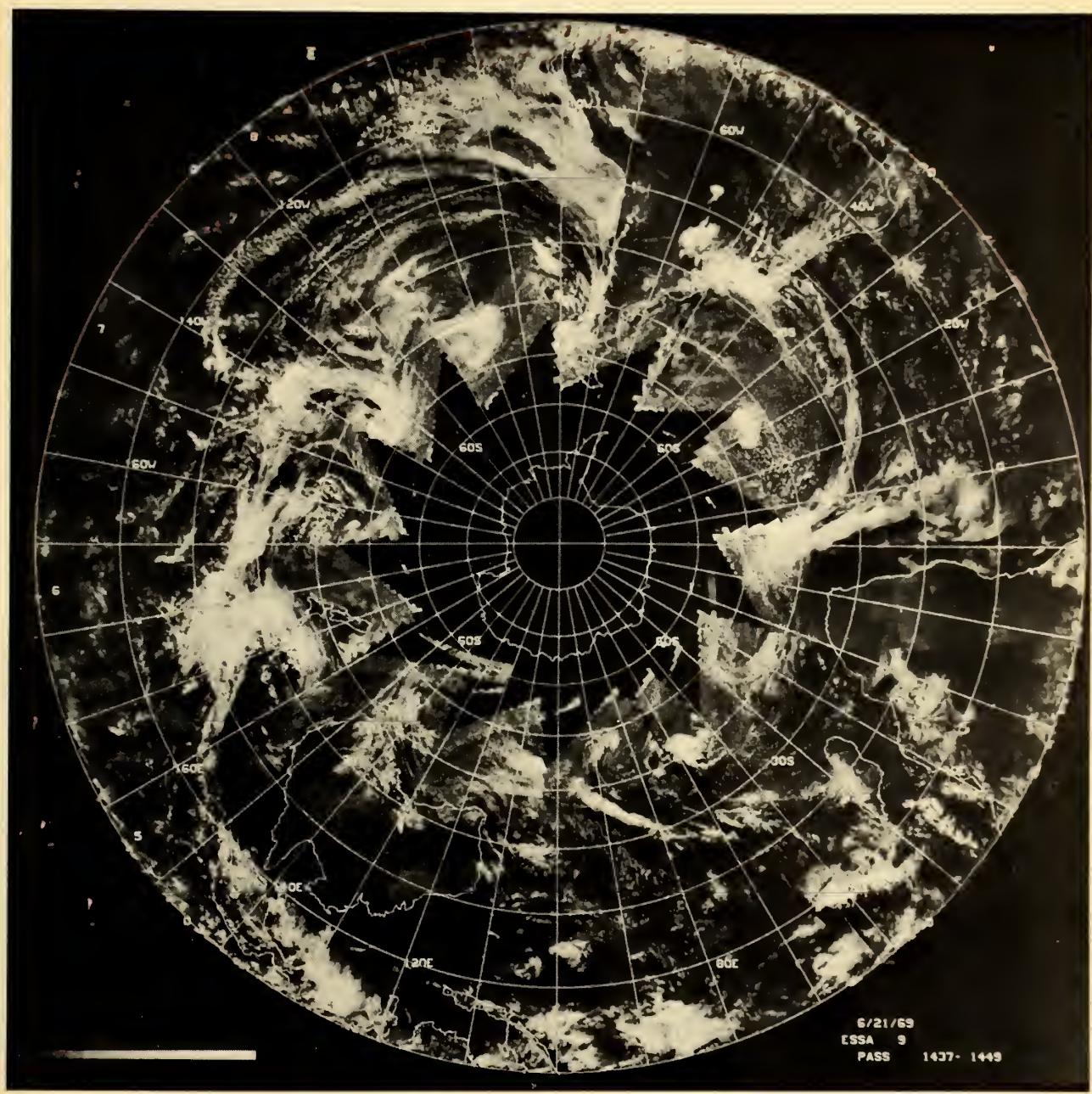




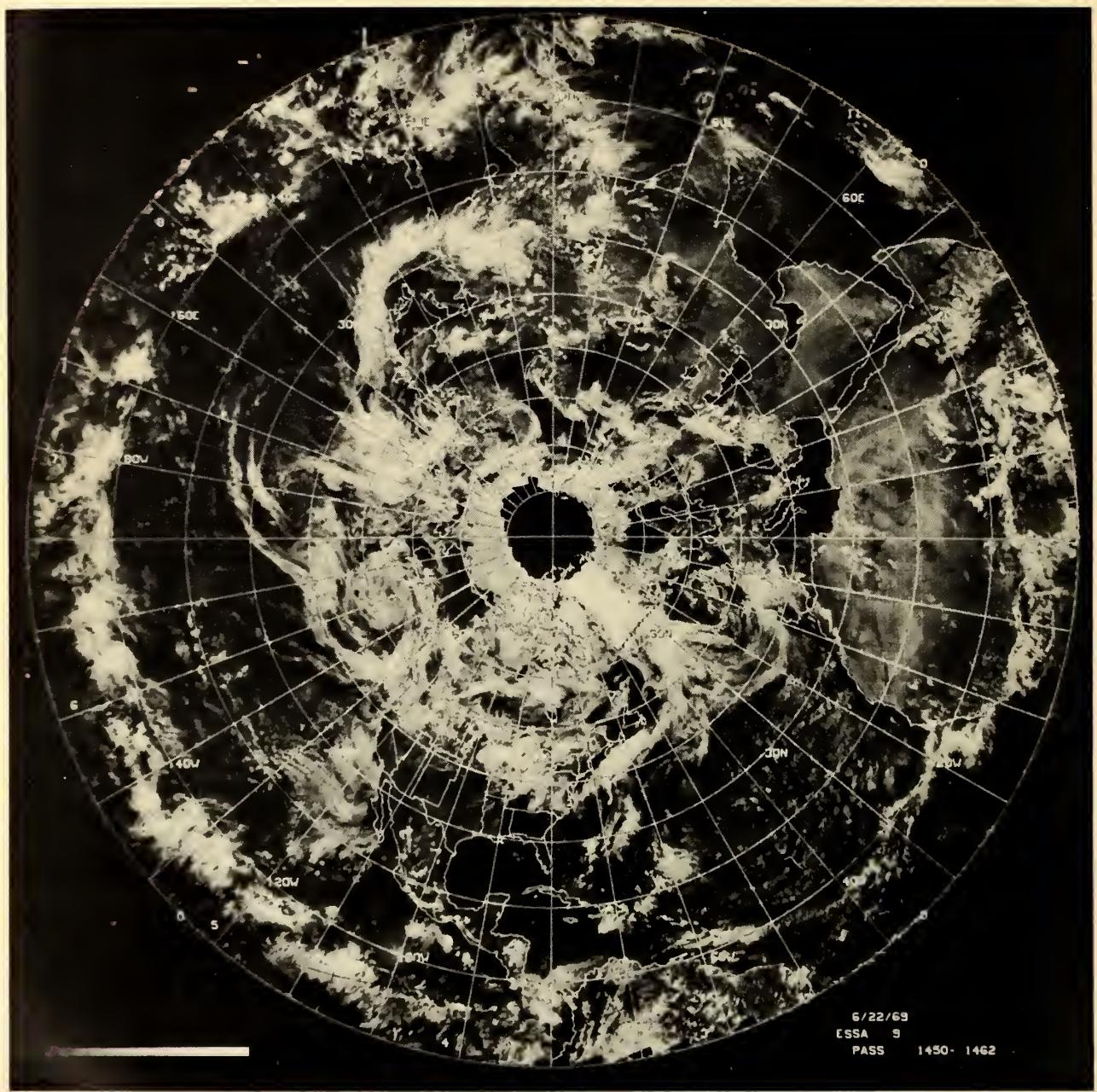


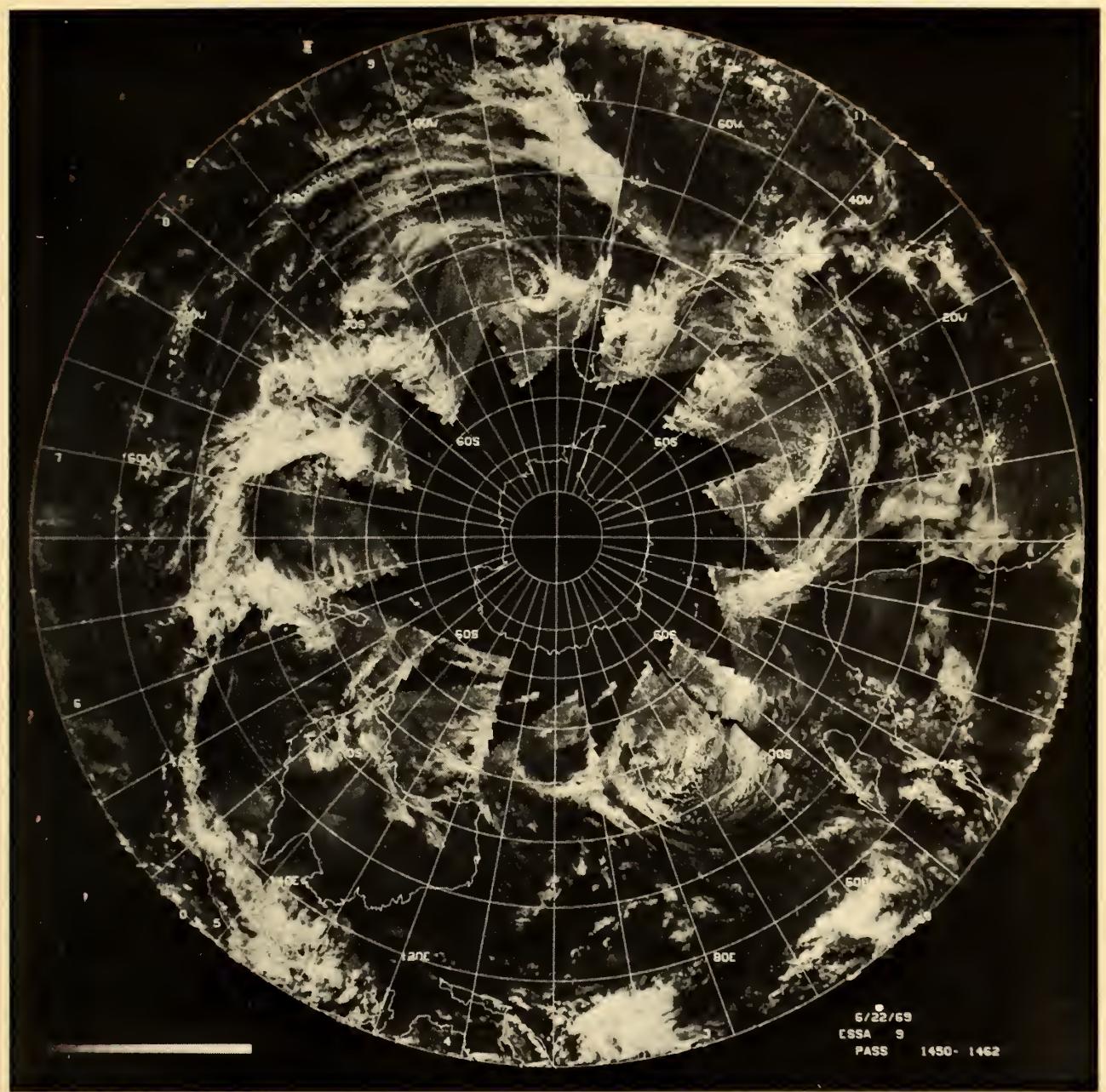


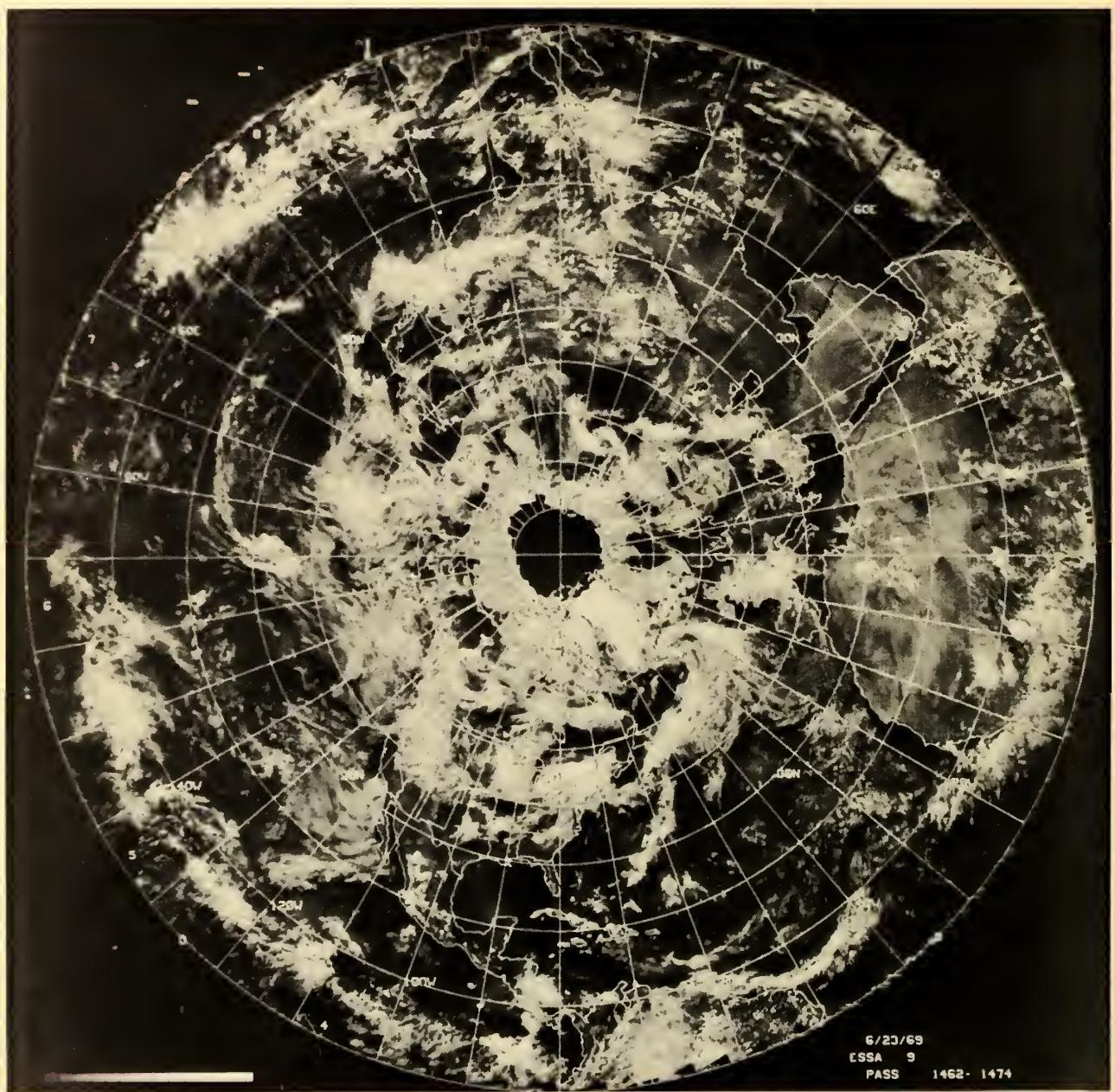




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ESSA 9
PASS 1437-1449





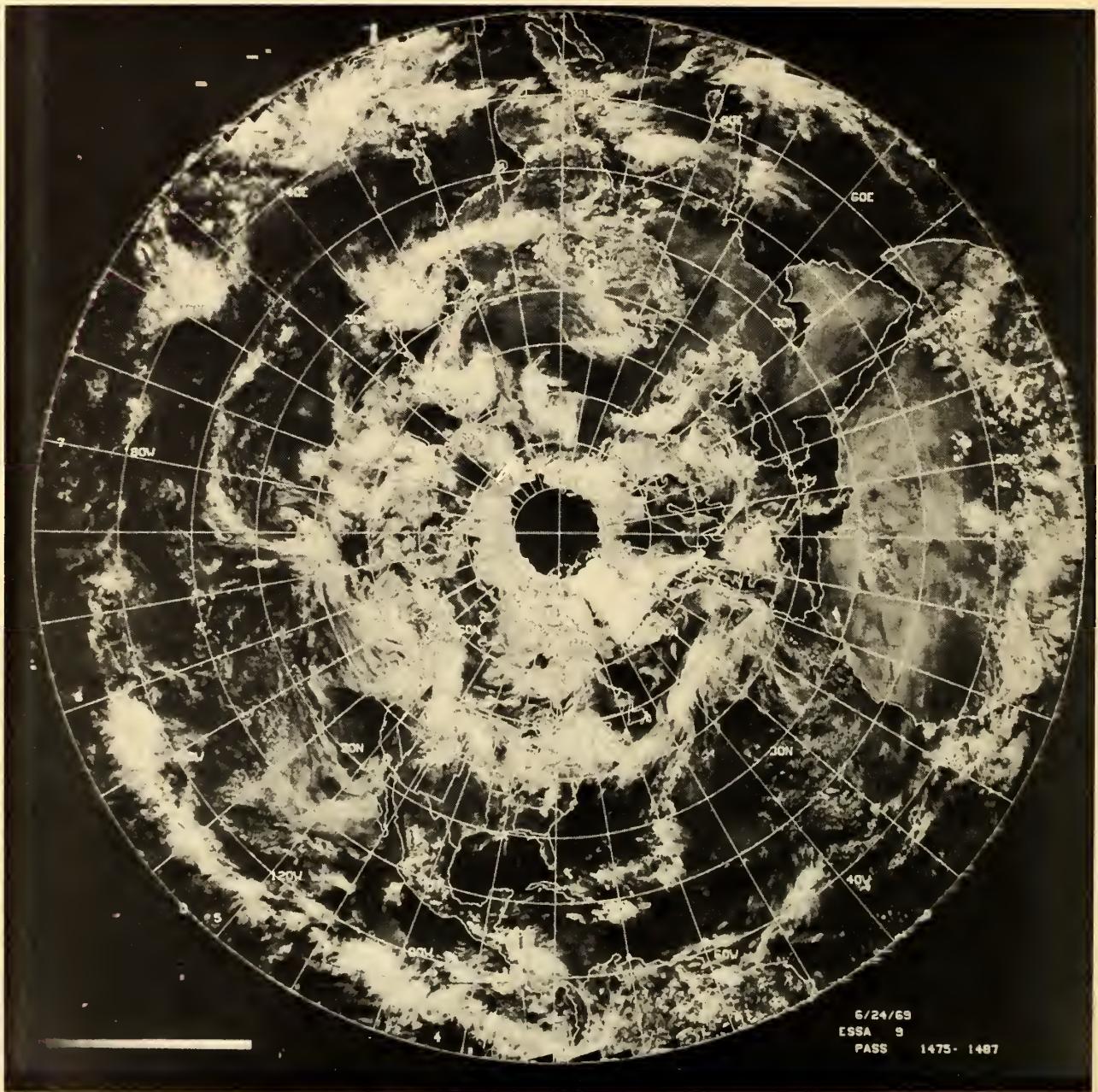


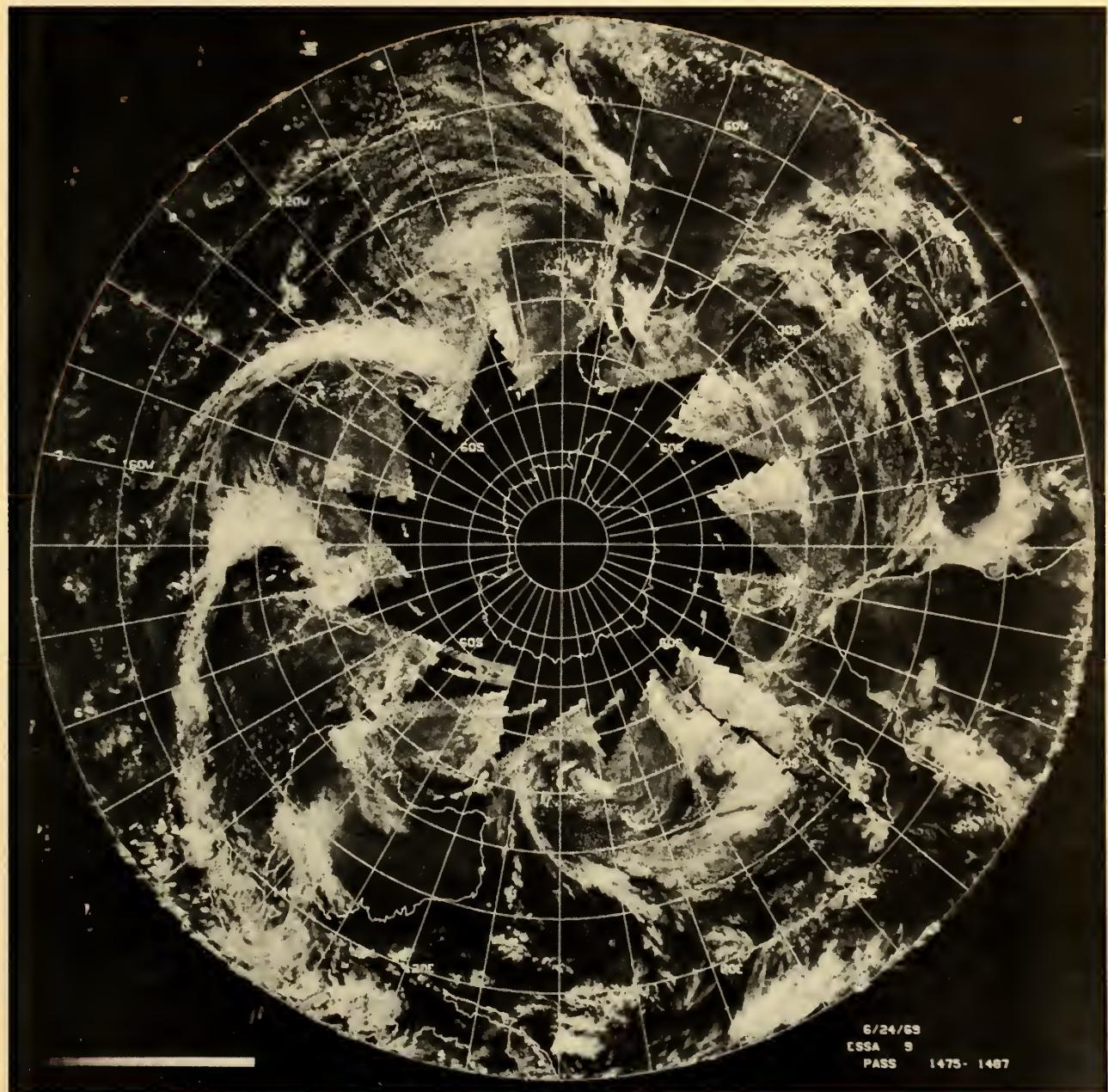
SOUTHERN HEMISPHERE

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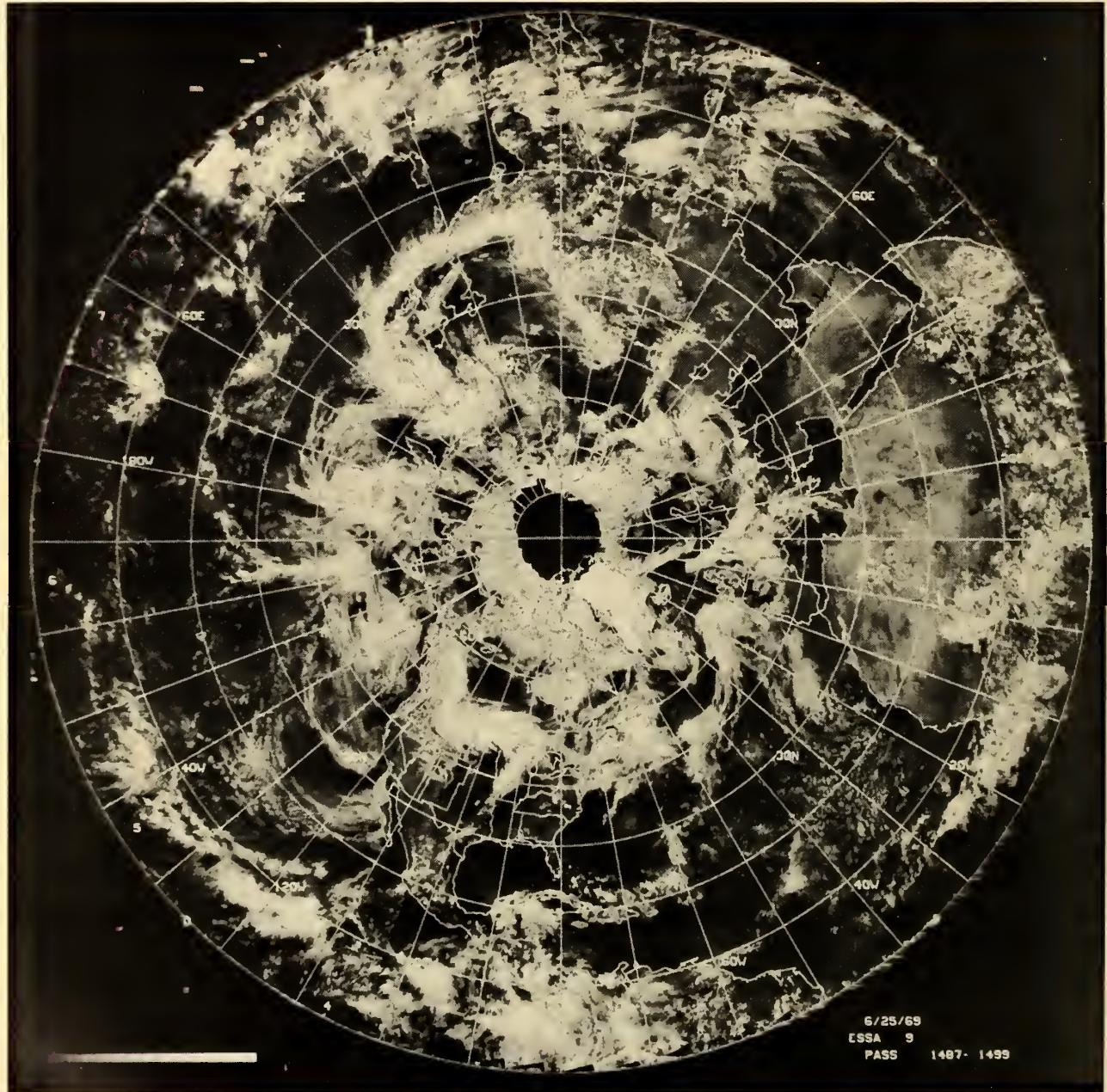
ESSA 9

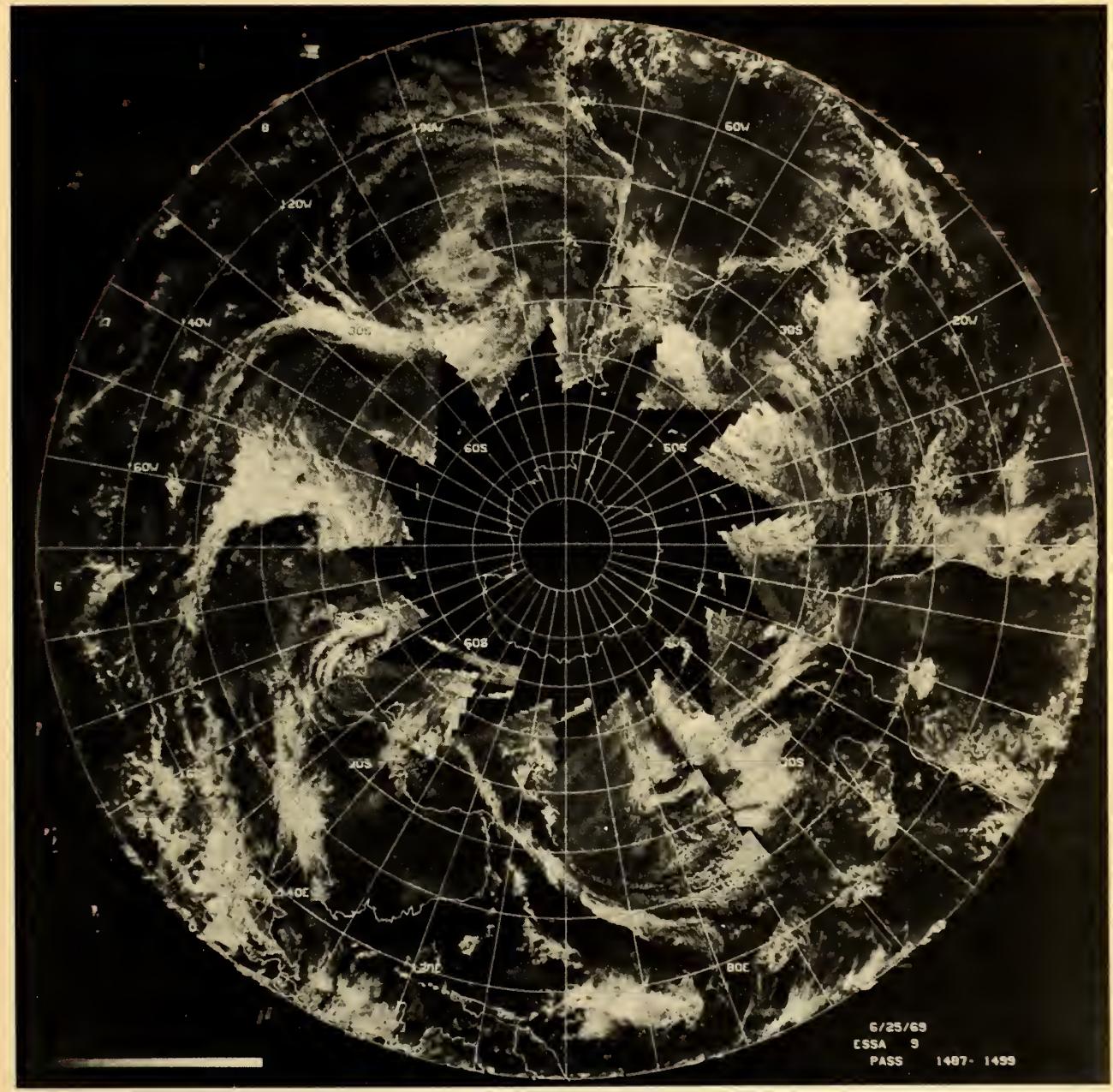
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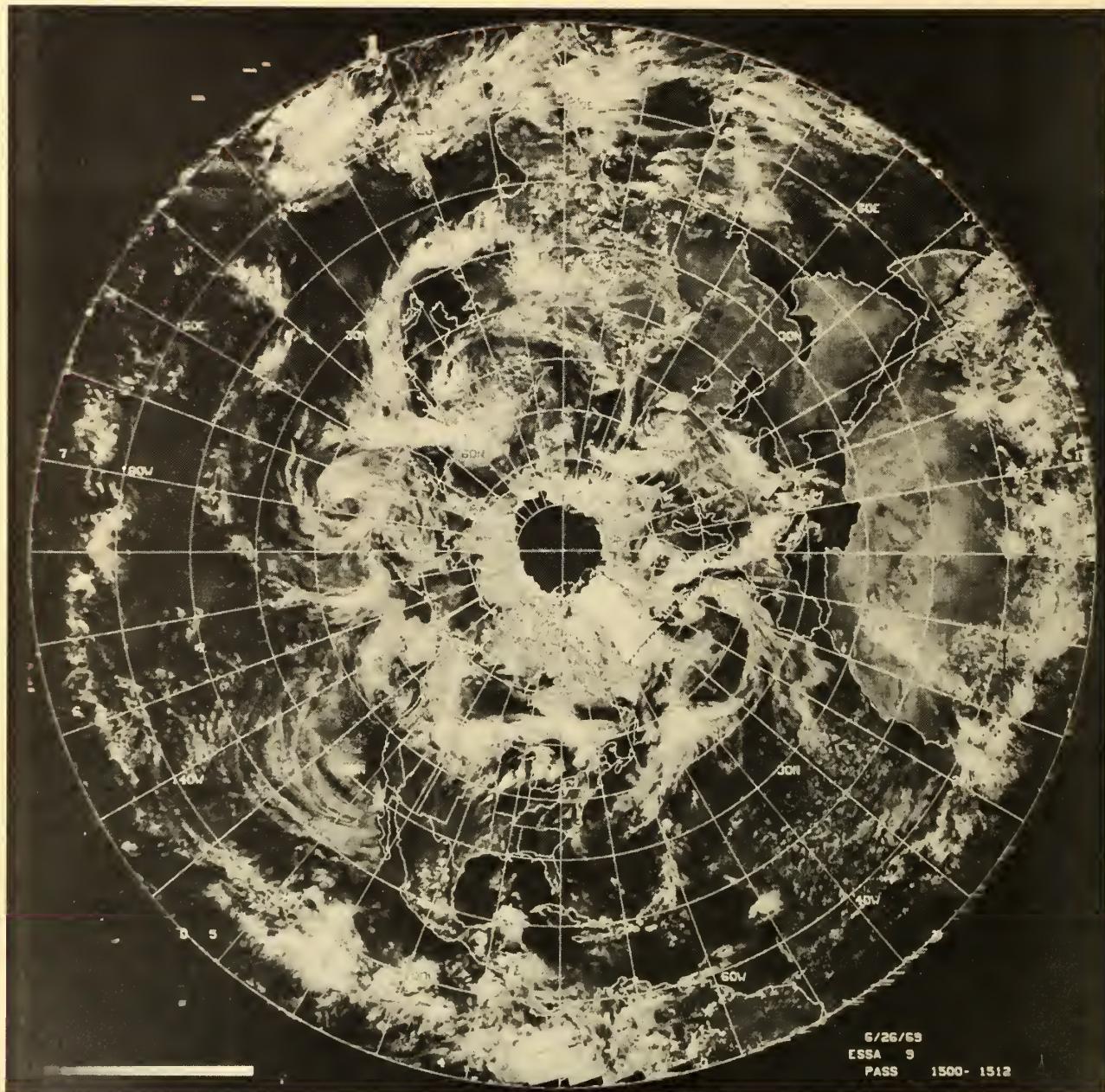


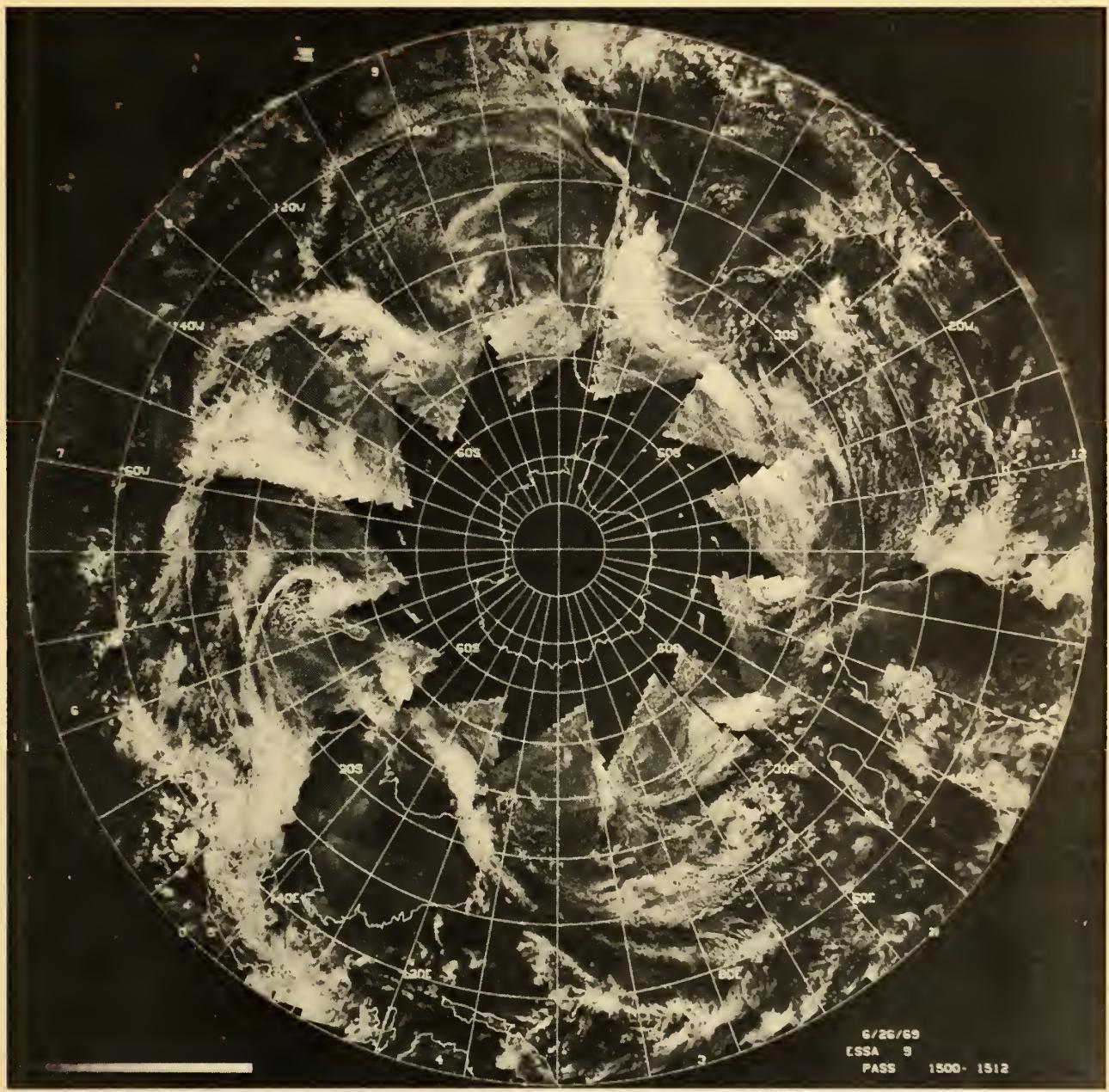


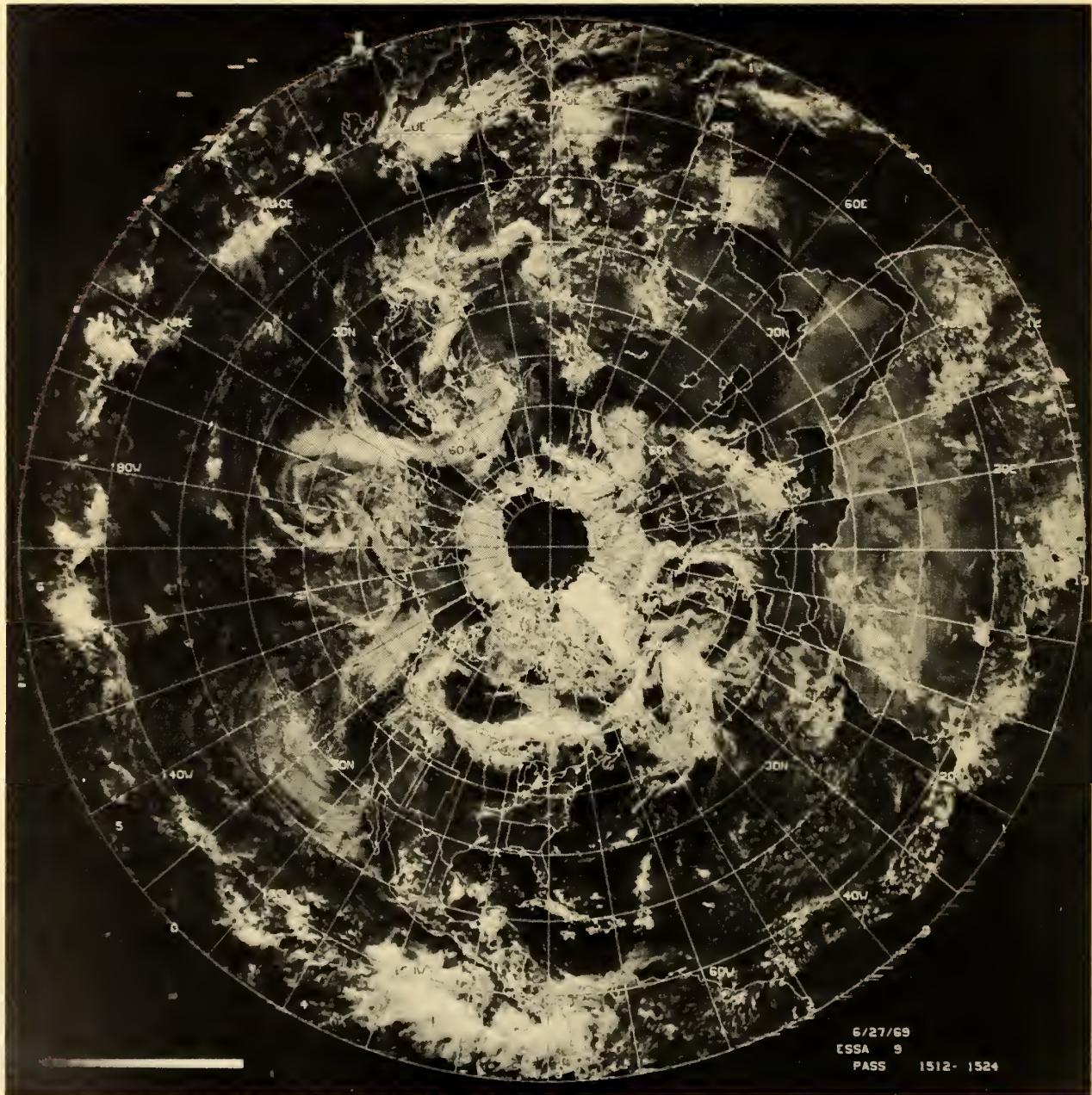
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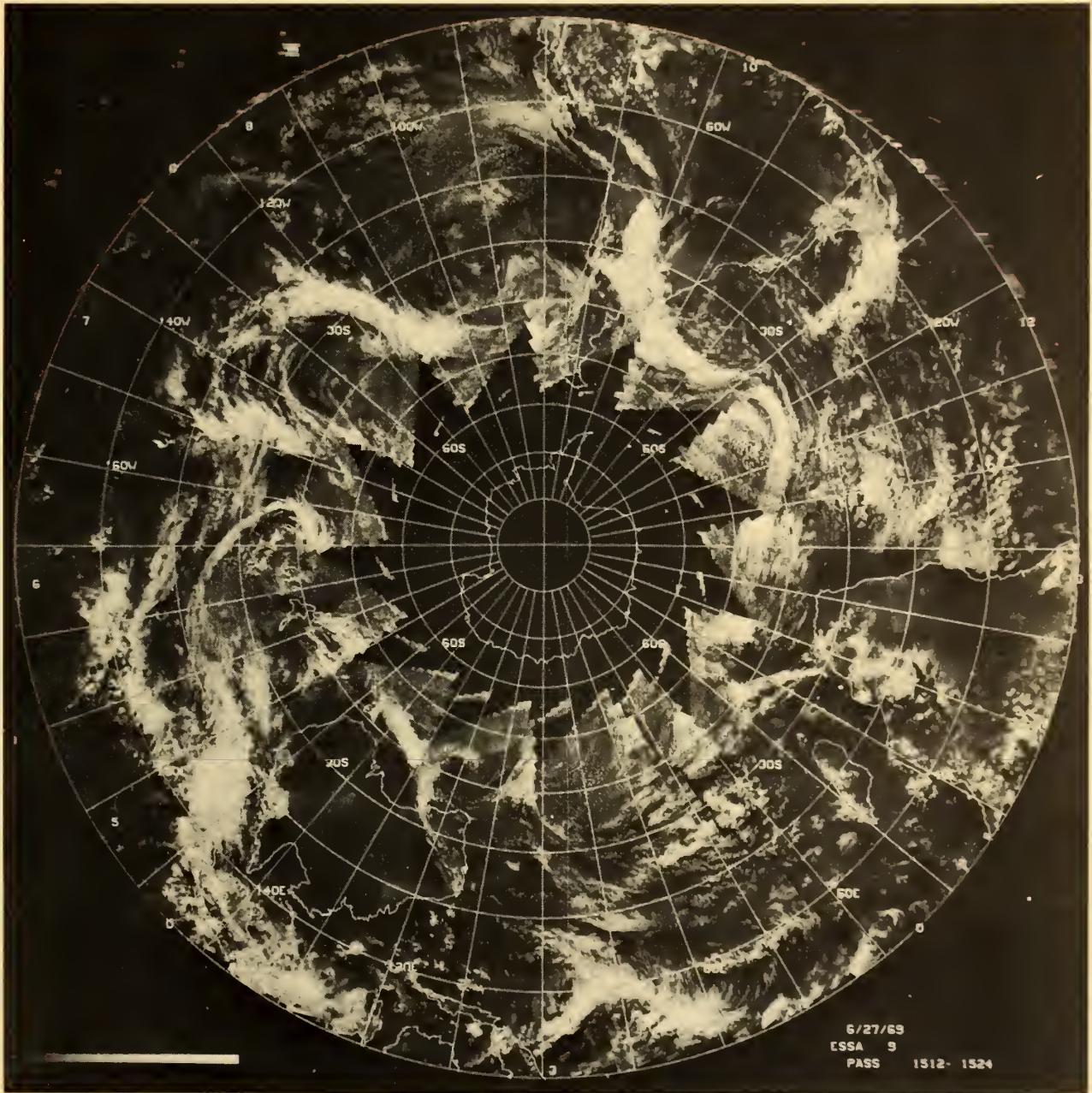


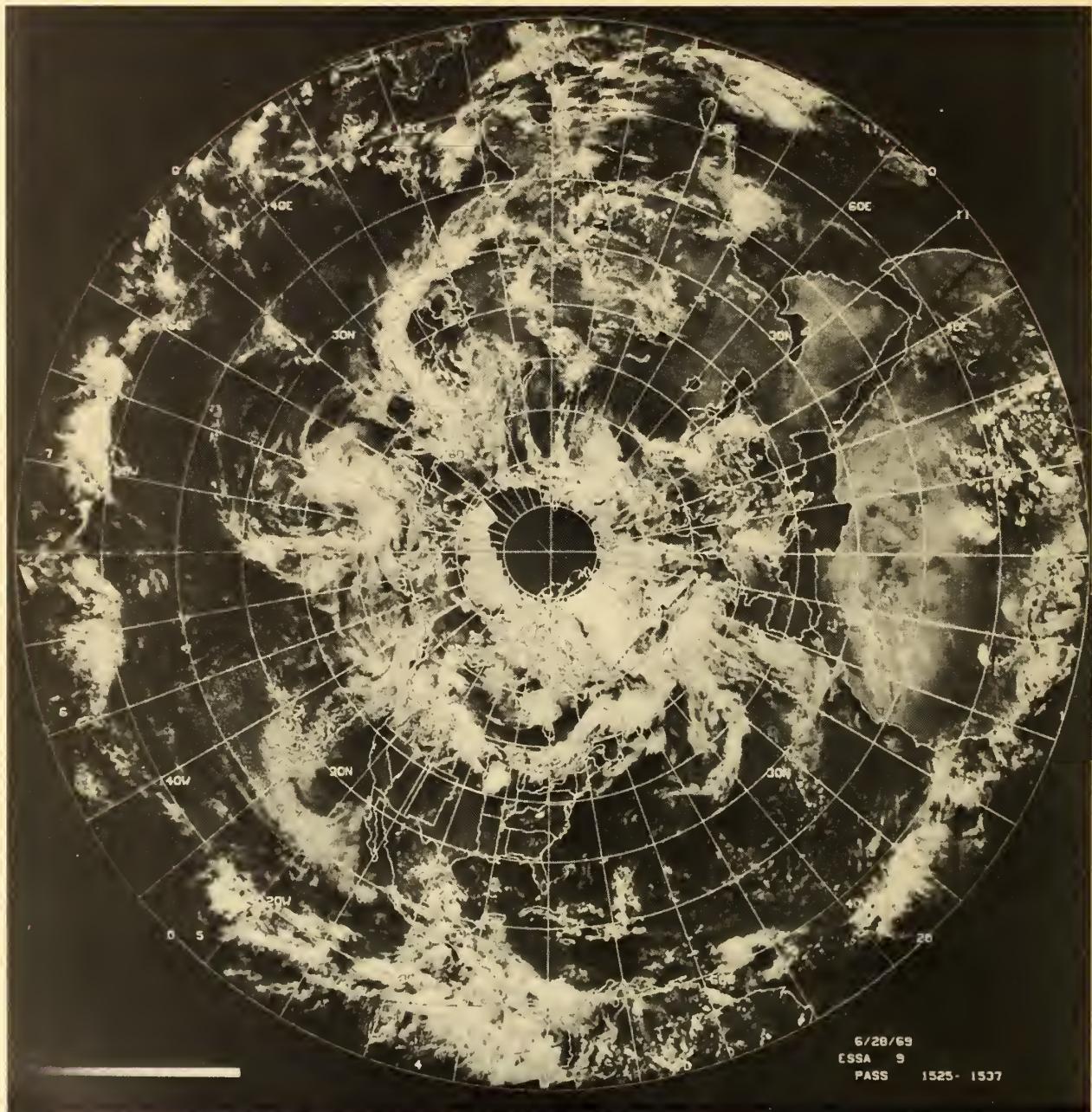


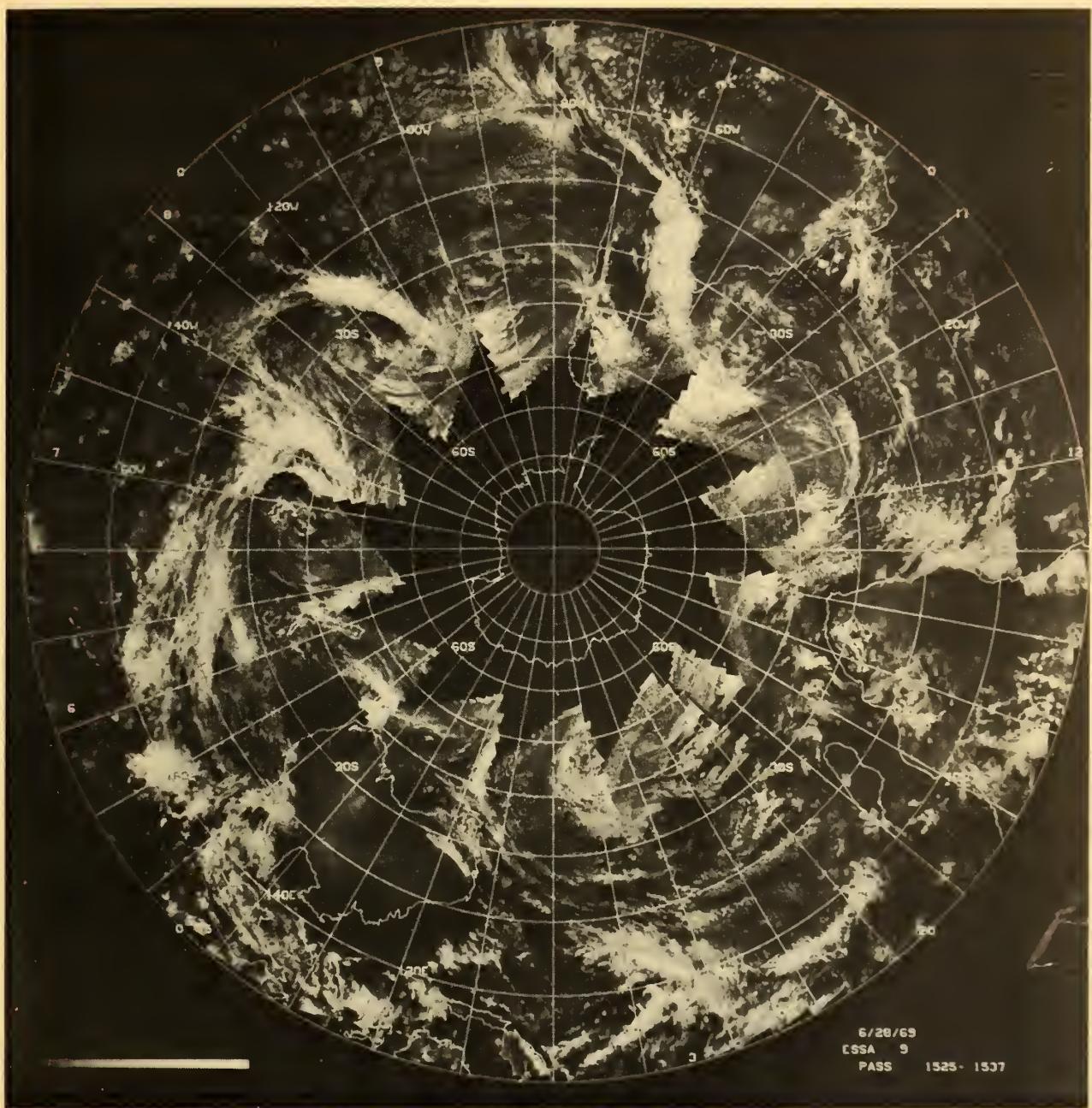


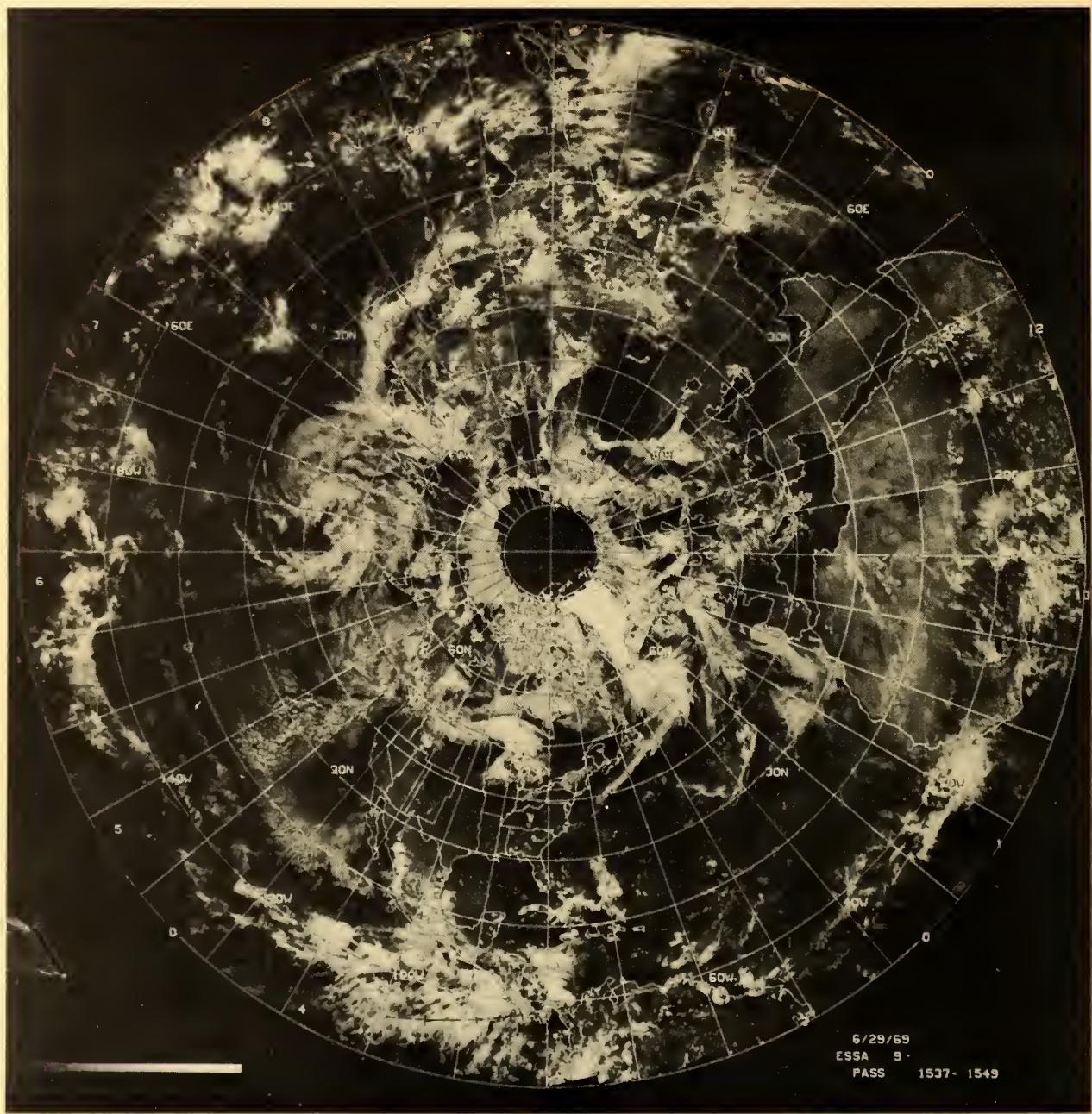


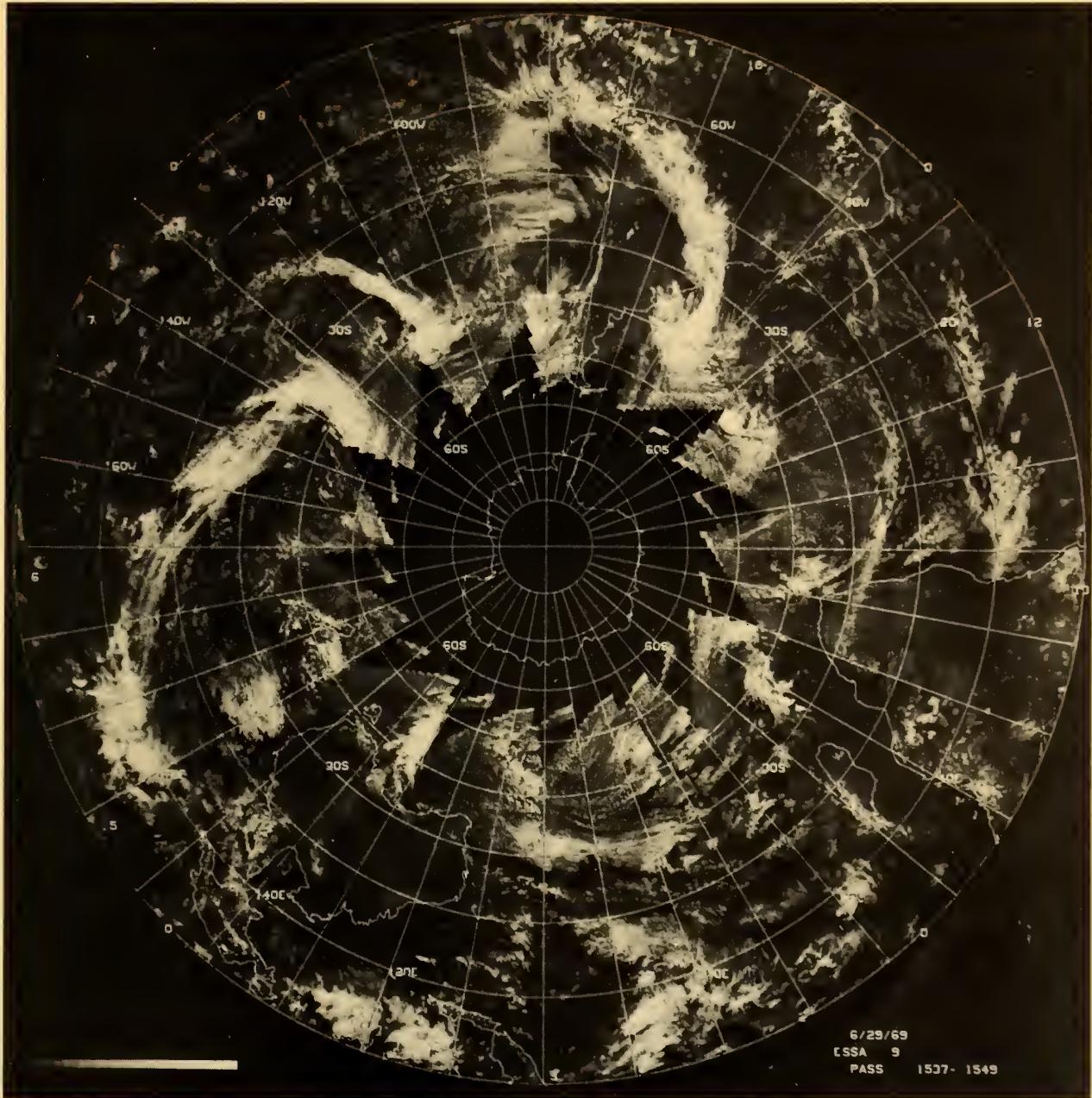


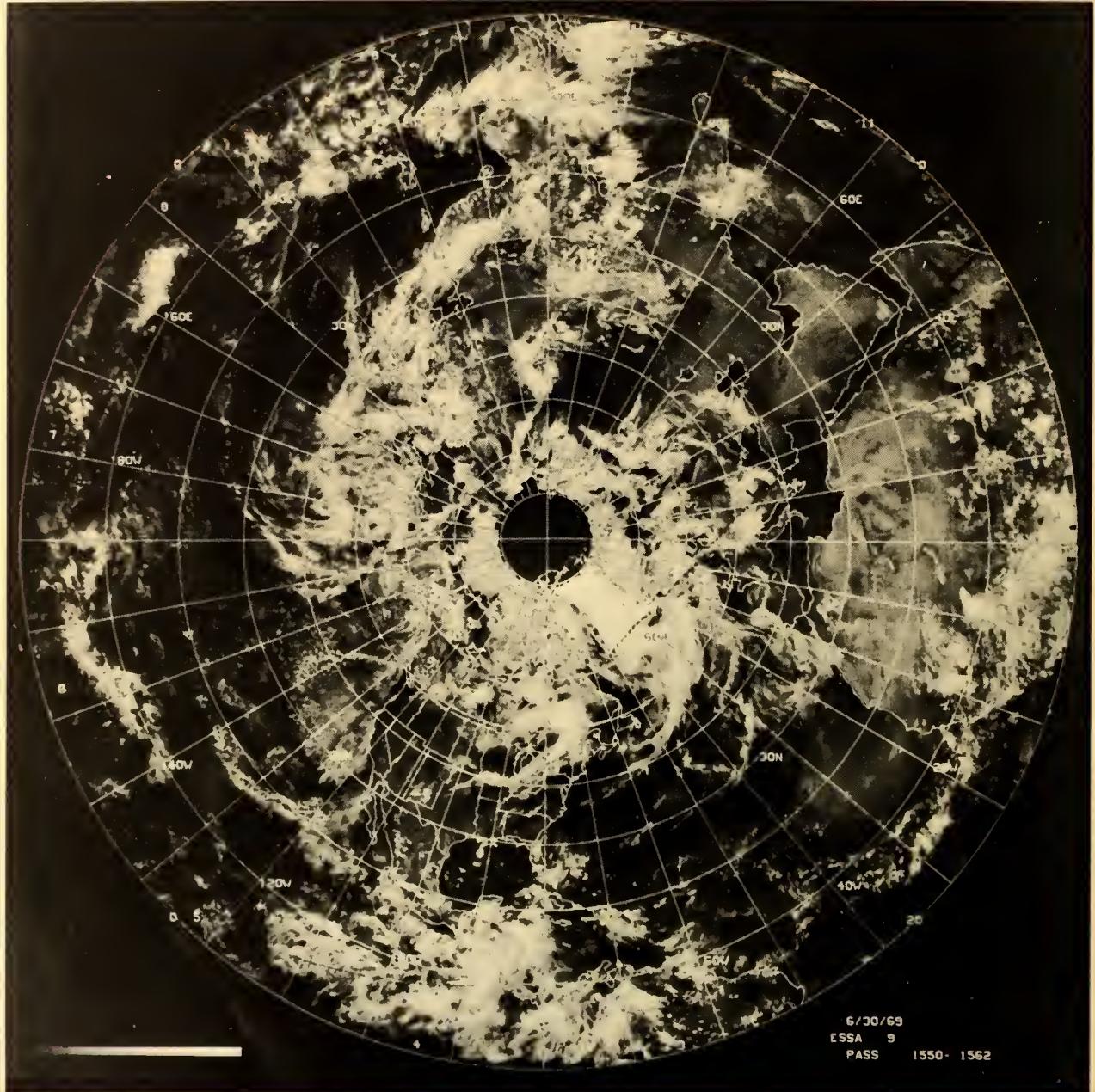




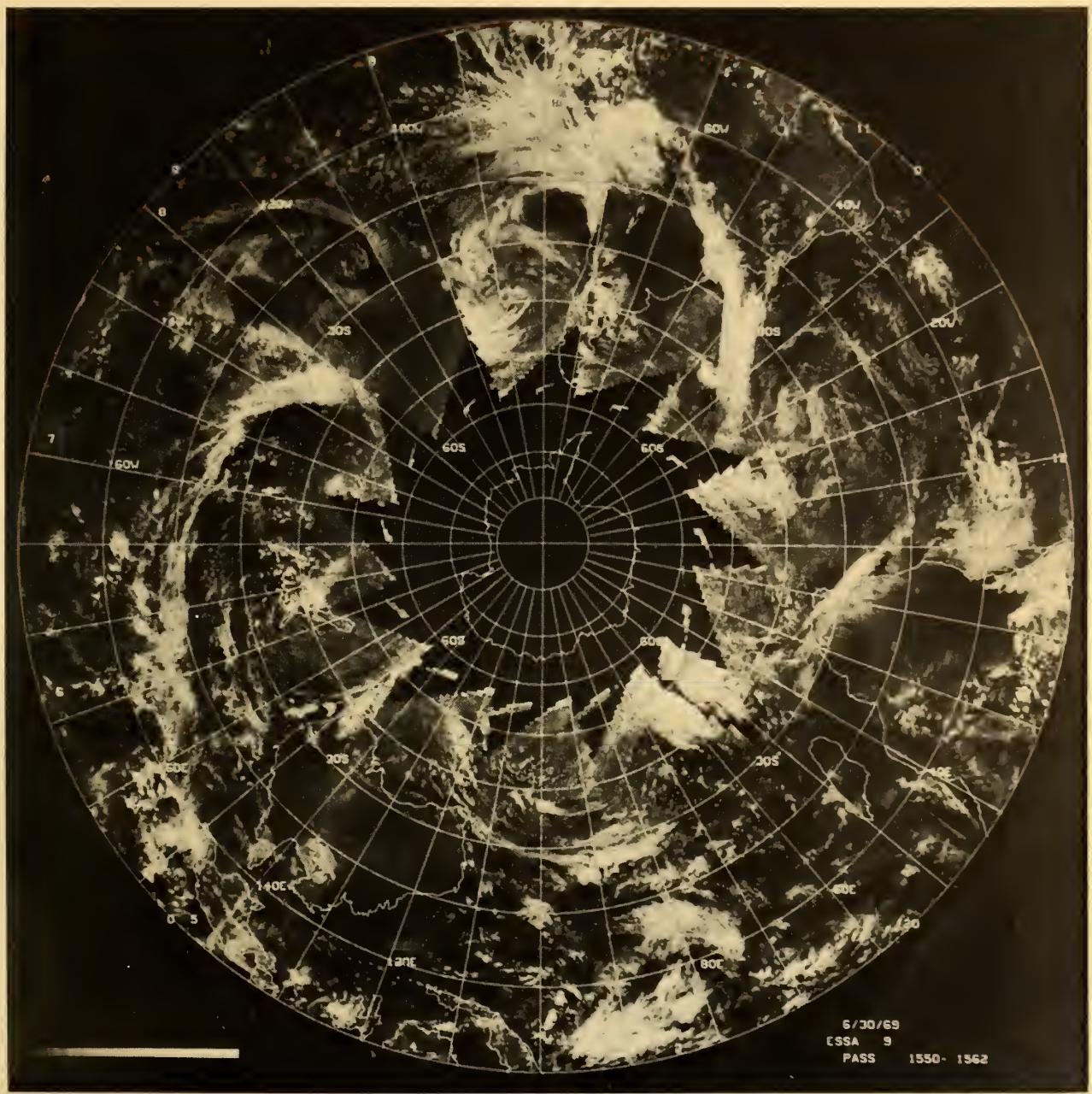








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- No. 5.38 "Catalogue of Meteorological Satellite Data - TIROS VIII Television Cloud Photography Part 3 January 1, 1965 to August 31, 1965", published in 1966, price 45 cents.
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- No. 5.320 "Catalog of Meteorological Satellite Data - ESSA 7 Television Cloud Photography October 1, 1968 to December 31, 1968", published in 1970, price \$2.00.
- No. 5.321 "Catalog of Meteorological Satellite Data - ESSA 7 Television Cloud Photography January 1, 1969 to March 31, 1969", published in 1970, price \$2.00.

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